

SOVIET LIFE

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SPECIAL ISSUE:
ARMENIA

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KEEPING CHILDREN HEALTHY

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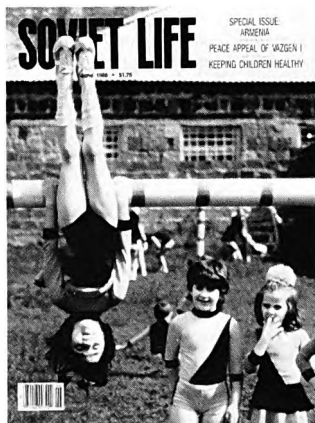
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by Grant Matevosyan

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SOVIET LIFE

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Front Cover: Oganess Arokelyan's program has been adopted by all the preschool centers in Leninakan. Story on page 62. Photograph by Yuri Somov.

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ARMENIA is one of the 15 sovereign republics that constitute the USSR. Located to the south of the Greater Caucasus ridge, it is the most mountainous republic in Transcaucasia: More than 90 per cent of its territory is 1,000-odd meters above sea level. The landscape ranges from desert to eternal snow.

Although Armenia is referred to as the "sunny" republic, its winters are sometimes quite cold. On the whole, the climate is dry and continental.

The highest point of Armenia is Mount Aragats (4,000 meters). The principal river is the Araks, with its tributary, the Razdan. The largest of the republic's many lakes (more than 100) is Lake Sevan, which is revered as a symbol of Armenia. Its amazing beauty and constantly changing colors have inspired poets and artists. The lake is part of a national park.

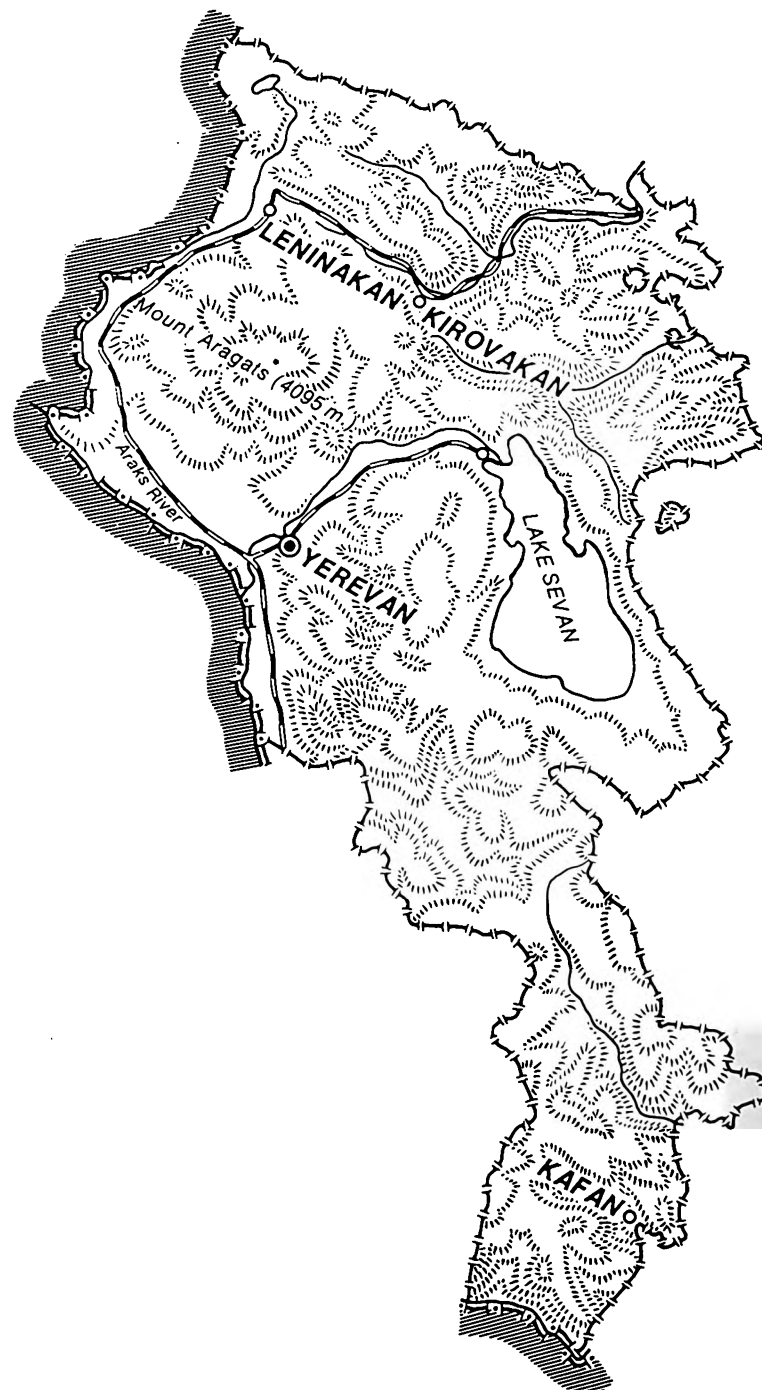
The population of Armenia is more than 3.3 million people, of whom nearly 70 per cent live in its 24 cities. Yerevan, the capital of the republic, is in the Ararat Valley, on the banks of the Razdan River.

Armenia, with an area of 29,800

square kilometers, is geographically the smallest of the Soviet constituent republics, but it is the most densely populated, with an average of 106 people per square kilometer.

One-fifth of Armenia's territory is covered by broad-leaved beech, oak and hornbeam forests. In this issue we offer a story on the untypical, woodland Armenia and its cities: Leninakan, the second largest city in the republic; Kirovakan; and the health resort of Dilizhan. Typical Armenia will also be covered in part, in an article on the modern town of Goris in the Zangezur Mountains.

Despite its stony soil, Armenia is famous for fruit growing, especially peaches and grapes. Not so rich in natural gifts, Armenia prides itself on the industriousness of its people. To have any harvest at all, they have to grub up stones and boulders, then they must bury the rock with appropriate soil, and only after that can they plant seeds. Rural Armenia is represented in this issue by the ancient village of Bzhni, located between Lake Sevan and the Ararat Valley.



ARMENIA

AN INTRODUCTION TO THE REPUBLIC

A visitor to Armenia is overwhelmed by the splendor of its mountainous landscapes—particularly the snow-clad peaks of Mount Aragats and the dazzling glacier of Ararat—and the torrents roaring in the ravines. In the sunlit valleys patches of golden wheat fields alternate with bright green vineyards and orchards. Higher up the slopes alpine meadows are used as pastures. Because of its volcanic past, Armenia is a land of stones. With land so difficult to work and a path so stony, the Armenians have developed a remarkable character of exceptional perseverance and industry.

Armenia is rich in minerals. Priority in mining has traditionally been given to copper ore. For thousands of years Armenia has been famed for the bronze articles produced by local smiths, whose craftsmanship is to be found in the museums of many countries. Just as celebrated is local pottery, from the immense karas pitchers spacious enough to conceal several men (hence such motifs in Oriental tales) to exquisitely painted delftware cups.

Armenia's geography has been a great boon to local architects, who have at their disposal a rich choice of natural building materials, from superhard basalt and granite, through tufa of various shades, to marble of exquisite beauty and fine cement. Local architects have used these materials to adorn the land with wonderful buildings that are in perfect harmony with the landscape.

A comparatively small territory, Armenia has more than 4,000 unique architectural monuments in towns and villages, in forest glades and shady ravines and on mountaintops. Some have survived, while others lie in ruins.

Armenia is one of the oldest centers of civilization. It has had its ups and downs in history, being a great power at one time, nearly destroyed at another. With the establishment of Soviet government it rose from the ashes to gain statehood and freedom.

EDITOR'S NOTES

In the nearly 30 years of our magazine's history, 5 of its 357 issues have been on Armenia. This special issue on Armenia, like all of its predecessors, is being published at the request of our American readers of Armenian extraction, and our readers' request is our command. We are presenting life in Armenia today and outlining some episodes from its past because it would be impossible to appreciate its present development without a glimpse of its history.

Armenia was probably the cradle of human civilization. I'll take only two proofs from the wealth of available data. One: Ancient smelting furnaces were discovered in the upper reaches of the Medzamor River, not far from Yerevan. Those furnaces, the oldest known to science, prove that the Armenians have been forging metals since time immemorial. They were probably the first smiths in the world. Two: Not far from the furnaces scientists found astronomical maps carved in rock, proving that the Armenians developed the theory of the movement of celestial bodies long before the Egyptians.

However, the life of the Armenian people on that ancient land was never peaceful. Armenia's long history is full of foreign invasions and bloody wars against the aggressors. The height of the national tragedy was the genocide of 1915.

Armenia has known peace only since November 1920, when it became a Soviet republic. The longed-for peace brought prosperity and well-being to the people. A formerly backward province of the Russian Empire, it has turned into an economically, scientifically and culturally advanced Soviet republic. Soviet Armenia has no economic recessions or crises, and it has no unemployment. None of its citizens are homeless, hungry or illiterate.

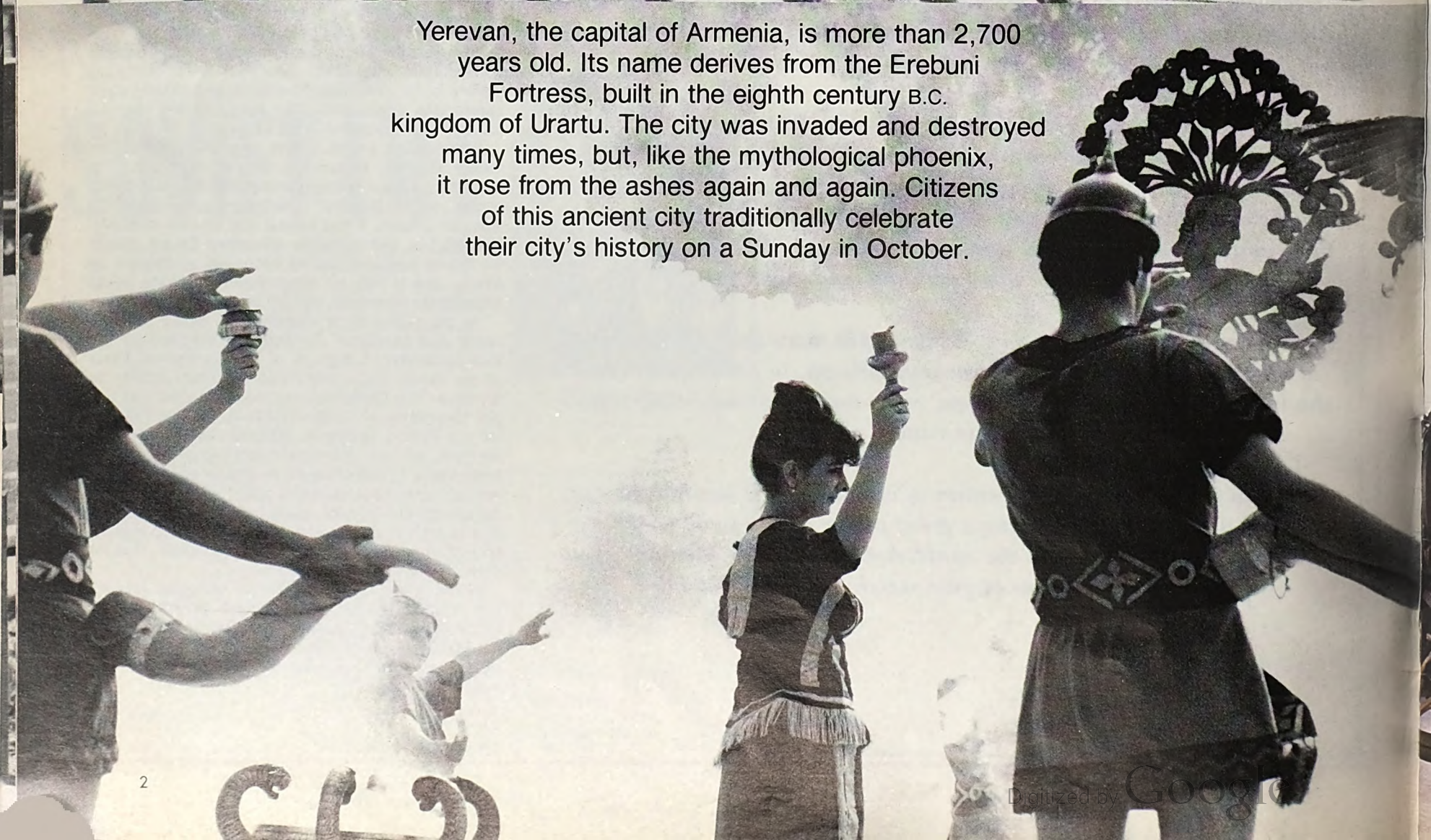
Yet the policy of accelerating the Soviet Union's social and economic development adopted by the Twenty-seventh Congress of the Communist Party of the Soviet Union early this year fully applies to Armenia. The Guidelines for the Economic and Social Development of the USSR for 1986-1990 and for the Period Ending in 2000 envisages the construction of new computer technology plants and enterprises to manufacture hydraulic equipment for remote-control manipulators and special technological equipment in that republic. This issue also includes a short article and pictures on the construction of the second unit of the Armenian nuclear power plant to be started soon.

We want to thank our team of Armenian journalists who made this special issue possible: team leader Gevorg Oganessian; photographers Armen Ter-Mesropyan and Ruben Mangasaryan; correspondents Julietta Amirkhanyan, Levon Dayan and Avet Demuryan.

EREBUNI



Yerevan, the capital of Armenia, is more than 2,700 years old. Its name derives from the Erebuni Fortress, built in the eighth century B.C. kingdom of Urartu. The city was invaded and destroyed many times, but, like the mythological phoenix, it rose from the ashes again and again. Citizens of this ancient city traditionally celebrate their city's history on a Sunday in October.





Photographs by Vitali Arutyunov

Yerevan's annual holiday begins with a theatrical performance that celebrates Erebuni's past and its present. The festival gets under way at Erebuni Fortress, as King Argishti, who built the fortress, arrives in the square outside it. After this opening ceremony, the festivities extend throughout the city, with interesting events taking place on every street and square.







Autumn is perhaps the best season in Yerevan. The fall leaves, ranging from pale yellow to crimson red, combine with the holiday dress and national costumes of the people in a brilliant visual display. The famous Yerevan fountains harmonize with the modern architecture of the city, providing a kind of natural stage setting for the festival dancers and musicians.

EREBUNI



Facing page: No holiday in Yerevan can do without schoolchildren, who add special animation to the festivities, both by watching and by taking part in them. The photographer was attracted by other interesting faces in the crowd, such as this medal-bedecked veteran.



Autumn is wedding time in Armenia. The occasions are especially festive on the Sunday of the Erebuni-Yerevan holiday. But young couples are not the only ones who enjoy this time. The Oganesyans, for instance, celebrated their golden wedding (above) and congratulated a young couple just married (top).

By Avet Demuryan

F

rom the rock that bears the cuneiform inscription of the date of Yerevan's founding, we know that the capital of Armenia is 2,767 years old. That was when Argishti, the King of Urartu, founded the fortress of Erebuni, a contemporary of Rome and Babylon.

Its age is not the only thing remarkable about Yerevan, as it is now called. This city had been conquered and razed many times. Only since the establishment of Soviet power in 1920 has it known lasting peace.

Yerevan is the thirteenth capital of Armenia. But even when other cities were the capital, it remained a symbol of the courage and unbending spirit of the Armenian people in the face of the countless trials that fell to its lot.

Sixty-five years out of the city's 28 centuries of history is a very short period. However, it was in this period that Yerevan grew from a small provin-

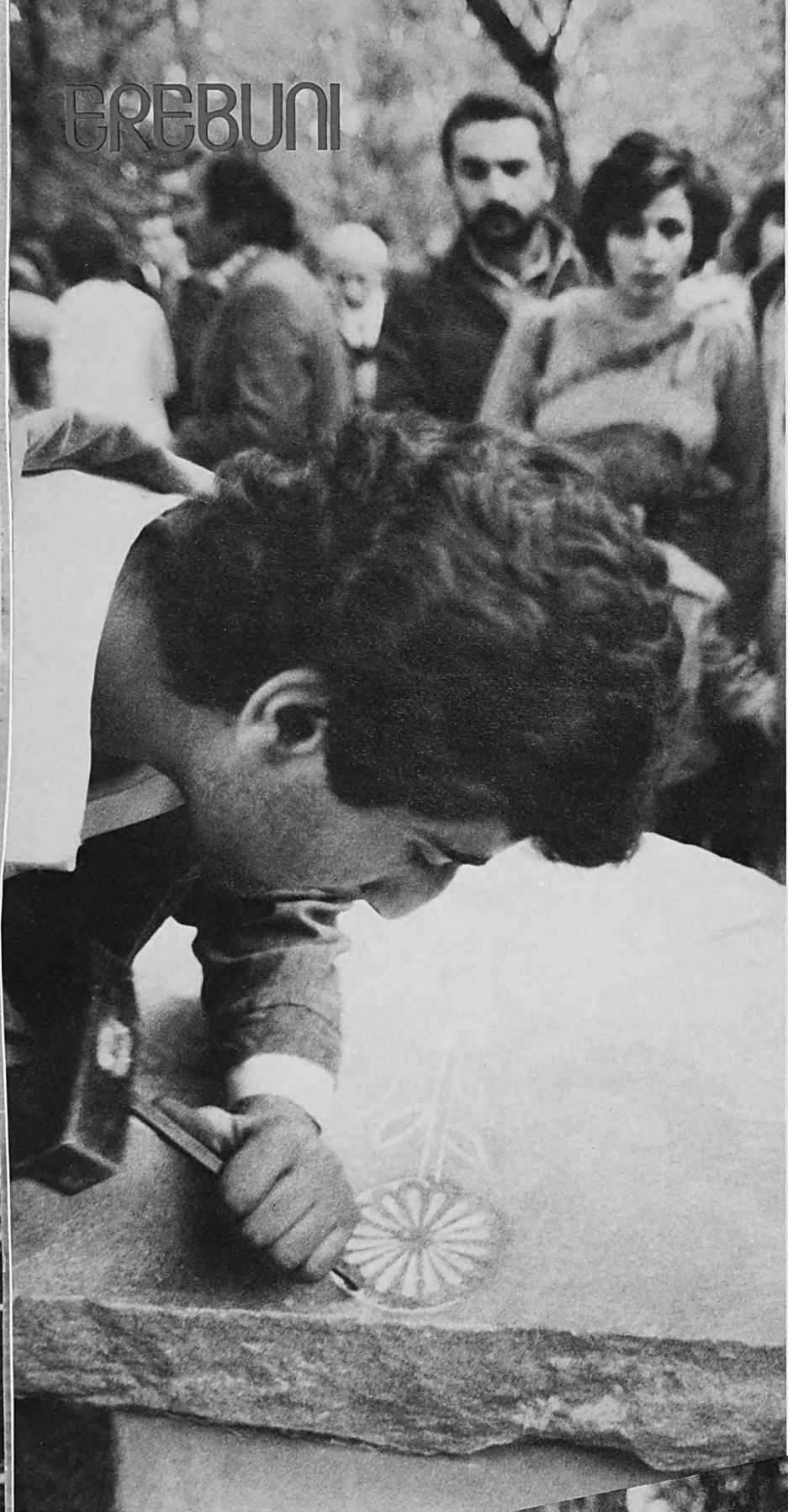
cial town (prior to Soviet times its population was only 30,000) into a handsome modern city with a population of 1,133,000, which is about one-third of the population of the entire Armenian Soviet Socialist Republic. The dilapidated adobe houses were replaced by architectural ensembles in all shades of tufa, from pale yellow to dark red (there is an abundance of this stone in the republic), while the narrow little streets were turned into broad avenues.

In place of the old craft shops and a small brandy distillery, which was considered the height of industry in Armenia before the Revolution, the republic now has a large number of modern enterprises producing a variety of goods, from light industry items to computers that are exported to more than 70 countries.

Yerevan didn't have a single school of higher learning before the Revolution; today it has a university and 11 institutes with an enrollment of 100,000 students.

Yerevan now has a new look and a new way of life. Among its new traditions is the annual Erebuni-Yerevan holiday. It is celebrated in October and combines many aspects of urban life, past and present. The holiday starts at the foot of Erebuni Fortress with a pageant that reenacts a page of the city's

EREBUNI





Facing page: Young tufa carvers carry on a centuries-old tradition. Top: Musicians in traditional dress perform ancient Armenian songs on old folk instruments. Above: The delicious fruits of the harvest are available all over the city. Right: A craftsman entertains onlookers with amusing stories of his own life and the lives of his colleagues while at the same time demonstrating his skills to a rapt audience.



centuries-old history; the thousand-strong crowd greets King Argishti, the founder of the citadel, as he rides past in a chariot. Different tableaux, games and dances transport the holiday-makers to those distant times when invaders from strange lands tried to bring the Armenian people to their knees and to tame their independent spirit. But the enemy was invariably defeated, and new capitals of Armenia arose from the ashes again and again.

The picturesque holiday that starts at Erebuni Fortress continues in different parts of the city. A friendship festival takes place at the foot of a hill called Swallow's Nest. The Armenians treasure their fraternal relations with the Russians and other peoples of our country who helped Armenia in its economic, social and cultural progress. Envoys from Russia, the Ukraine, Georgia, Azerbaijan and the other Soviet republics perform their dances and songs for their Armenian hosts.

A ceremony conferring the title of Honorary Citizen of Yerevan takes place in Lenin Square, the city's main square. In October 1985 the recipients of the title were writer Sero Khanzadyan, Major General Galk Martirosyan and electrician Roland Movsesyan. All three were presented with honorary scrolls and commemorative medals.

At the folk crafts exhibition, people could watch the metal chasers, the potters, the stonemasons, the weavers, the woodcarvers and the stonecutters and jewelers at work. Everything there was reminiscent of the little shops in the old-time marketplace. Alongside the traditional ware of the potters were the items produced by the local porcelain factory. Traditional footwear was displayed next to the fashionable shoes being made today. Armenian national

costumes hung next to the clothes manufactured at the Yerevan Clothing Factory.

Truckloads of flowers of all kinds are brought to another spot in the city. They are used for making all kinds of original bouquets and flower arrangements. Exhibitions of cacti are especially popular, and the contributors share their methods of growing the plants with interested visitors.

Autumn weddings in Yerevan are unique. Several young couples who got married during the Newlyweds Holiday will never forget the experience. The Oganesyans, who were celebrating their golden wedding that day, came to wish the young people happiness, a peaceful sky over their heads and long years of life together. As in the old days, the wedding guests shower the newlyweds with wheat, offer *lavash* (Armenian bread), and break plates, broken dishes being considered a symbol of luck.

The Holiday of the Harvest takes place on the banks of the Razdan River, where an old-time Armenian village, with its huts, smithy and potter's shop, has been reproduced. Musicians playing the *zurna* (a national wind instrument) and the *dhol* (a percussion instrument) invite visitors to admire the tightrope walkers, wrestlers and trick riders.

That day Yerevan University celebrated Science Day.

Musicians and poets, composers and actors also contributed to this autumn holiday by performing on open-air stages in all parts of the city.

The painters and sculptors expressed their love for their city by arranging an exhibition called "Yerevan and Its Residents," in which the past intermingles with the present.

ARMENIA

SHORT-TERM AND LONG-TERM PRIORITIES



Fadei Sarkisyan,
Chairman of
the Council
of Ministers
of Armenia.

Q:

What are the highlights of the republic's plan for social and economic development for 1986-1990 and for the rest of the century? What are the most difficult problems to solve?

A: To do its part in carrying out the program advanced by the Twenty-seventh Congress, Armenia has set a course toward accelerating its social and economic development. This is to be achieved through introducing high technology, intensifying economic growth and perfecting the system of economic management. The overriding objective is to improve the people's well-being. That does not mean improving their actual welfare

only, but raising their standard of living and quality of life in every area: work environment, recreational facilities, pollution control, advanced education and enjoyment of cultural advantages.

Industrial output in Armenia is to go up by 24 to 26 per cent under the current five-year plan. This target, set by the Guidelines of the Twenty-seventh Congress, is not easy to attain, of course: The projected growth rates for many of the other republics are not so high. The growth rates, are certainly not the only thing. A technological reequipping of all industry and farming will be accomplished along with structural reshaping. Machine building is taking precedence in our industrial expansion. It will predominate in over-all industrial production by the year 2000.

Power engineering is emphasized in Armenia's long-term economic program. The generating capacity of nuclear power plants is to be doubled, more of the water resources of its small rivers are to be tapped, and the thermal power plants now operating are to be reconstructed. The gas pipeline and gas storage capacities will be expanded.

A vast social program is to raise the people's income levels by half again as much by the end of the century. This increase will be achieved principally by increasing wages and funds for social programs.

By 2000 we shall have enough day-care centers to accommodate all of the republic's children. A sufficient number of schools with the most modern equipment will have been built. Health services are to be expanded and more community centers, movie houses and sports stadiums constructed.

Housing development is high on the list of our priorities. In the period 1986-2000 we are planning to build housing with a total floor space of 23.6 million square meters. This approximates the total urban housing of the republic in the early eighties. Upward of four-fifths of the new construction is state-funded. There will be more cooperative and individual home-building financed by long-term low-interest loans. By 2000 each Armenian family will have either an apartment or a house all to themselves.

The most difficult problems to solve will be, first of all, the distribution of the productive forces and the rational use of our labor resources. The most complicated thing is to balance the growth rates of various sectors of the economy of the republic along with ensuring the even development of all of its regions.

We are counting on advancing science-intensive industries crucial to technological progress and not requiring too much labor. The republic has extensive research facilities and an efficient labor-training system so the prospect is not bad.

Q. Do you find the present demographic situation in Armenia favorable? Will the rates of urbanization, high as they are, pick up again by the end of the century?

A. In 1984 the republic had the largest number of births in the history of Soviet Armenia—almost 80,000. The relatively high birth rate can be attributed to an

effective social policy, things like the partially paid 18-month leave for mothers to look after their children in addition to the fully paid 16-week maternity leave.

A high divorce rate is typical of many advanced nations. In this respect, our republic is a rare and, I would say, happy exception. In Armenia, the prestige of the family and that of the children in a family is high. An average urban family has two children, and a rural family three. The relatively high birth rate combined with one of the world's lowest infant mortality rates has brought about stable, if moderate, natural population growth, making for a favorable demographic situation.

Urbanization is, of course, continuing. I think it may even gain more momentum. New industrial centers, like Abovyan, Razdan and Charentsavan, have appeared in Armenia in recent times. There has been notable industrial growth in some old small towns as well. This decentralization of industrial production has somewhat held down the growth of Yerevan and other big cities of the republic. Not long ago Yerevan accounted for half of the total urban population growth in Armenia because of intense migration. Today, the growth rates of the republic's capital are down by almost a third. This trend will be maintained by encouraging rural and small-town development.

Q: Our readers have been impressed by the speed with which educational standards have risen in the Soviet republics, including Armenia. But they have a natural question, so painful for many industrialized nations: Won't you eventually have more college and university graduates than jobs available for them?

A: Planning the number of college and university graduates needed is a rather complicated process in this age of high technology. One must be able to look years ahead and to take into account the promise that any particular line of production will hold as well as the possibility of an imbalance between trained specialists and the actual demand for them. You are perfectly right in noting that this problem is typical of many industrialized nations. But in the Soviet Union social and economic growth is not spontaneous but planned. The point is to make this planning accurate and flexible and to be able to think with an eye to the future. In our college and university planning, it is necessary to take into account all factors and specific features of each particular republic and its regions. For example, the shortage of labor trained in a number of up-to-date technical specialties that beset Armenia some five or ten years ago has since been remedied.

Our system of training specialists, I repeat, must be flexible enough. For instance, admission to Armenian colleges and universities has been cut off for three specialties and reduced for 26 in the past four years. Instead, instruction in six new fields has been introduced and the volume of training increased in 26 other specialties that have become essential to the republic's economy. We are even changing the specialization of entire colleges.

There is a growing demand for engineers in Yerevan at present, as distinct from the current demand for teachers of physics, mathematics, chemistry, drawing and some other school subjects: We are producing more of the latter than we need. Therefore, the output of the respective departments of the institutes of education has been falling. On the whole, however, Armenia has a favorable personnel training record.

Q: The standard of living of Armenian families of most diverse social groups has been rising. Consequently, the people's needs and the demands they are making on the quality of life are going up quickly. What problems arise from that, and how are they resolved?

A: The priority in dealing with problems of this kind in the republic, just as in the rest of the Soviet Union, depends on their urgency. The demand for foodstuffs—please note that I am referring to the whole wide range of products rather than to the total amount, which is quite sufficient—will be satisfied step by step as the Food Program is carried out. To do so in Armenia implies raising the growth rates of agricultural production, extending land reclamation

There is much to be done in Armenia to accomplish the objectives set by the Twenty-seventh CPSU Congress. In an interview with Gevorg Oganessian, Fadei Sarkisyan, Chairman of the Council of Ministers of Armenia, sums up the republic's short- and long-term priorities for meeting this challenge.

and management, consistently bringing stony and salty soils into cultivation, creating new production units, in short, appreciably expanding the entire network of farming and related industries.

Speaking of the production of manufactured consumer goods, our job is to improve their quality considerably. The momentum of the "gross output mentality" still exists in some areas. It has to be eradicated, and there has to be a flexible response to market demand.

The standards that people want the new housing to meet have become very high in recent times. Housing construction is proceeding on a broad scale. For example, almost 540,000 people have been rehoused, mostly at the expense of the state, in the past five years. Besides, rent in our country is very low—three to four per cent of the family budget—and the demand for apartments with all modern conveniences comes from people of all social groups, regardless of their income level. It is not easy to meet that demand, but we shall not renege on our plans. Housing construction in Yerevan alone, where half of the republic's urban population lives, will expand by almost one-third under the current five-year plan.

Rising incomes, with the prices of staple goods unchanged, allow our people to spend a growing proportion of their family budget on all kinds of services. It is no secret that the service industries are not yet well developed in our country. But sizable allocations for improving them are already paying off, and things are improving.

Q: The fundamental approach of Armenia's academic institutions to researching the history and modern problems of Armenian letters and language, arts and culture in general, is well known—in other countries, too. But how much does the younger generation know about Armenia's native cultural achievements?

A: The history of Armenian letters and the Armenian language figure prominently in the school curriculum. Our children are being exposed to the works of the best prose writers and poets dating back to ancient times. Besides, schools have literature groups in which pupils study works of ancient Armenian and classical literature in greater detail. Theatrical performances of the Armenian classics are very popular.

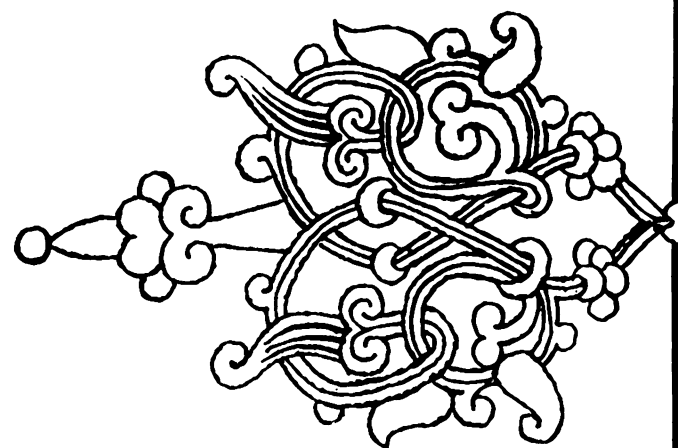
I would add that Soviet Armenian schoolchildren are very familiar with the works of Armenian writers abroad. There isn't a youngster who doesn't have a good knowledge of the books by William Saroyan, to cite just one example.

Q: This magazine has more than once referred to the children's picture gallery in Yerevan, which has become quite famous, and to some of the interesting things that stimulate the independent creative activity of children. We have said that all these elements combined make up a well-thought-out system of esthetic education. Has such a system really come to stay? Our readers are interested, particularly about the financial side of the matter. Doesn't setting up a children's esthetic center demand a handsome investment?

A: Let me say, first of all, that this system is well established. What we are doing in terms of esthetic education is not a short-lived drive but a fundamental effort that is already bearing rich fruit.

Martiros Saryan, the dean of Armenian painting, said: "The life of a child is a fairy tale. Children have an artist's eye. We, the adults, must guard and nurture the stirrings of the beautiful in a child's soul. Everyone can grow up to be a creative artist."

Is such a center needed at all? The fact of the matter is that drawing and modeling are included in the curriculum of all schools of general education. Many towns and townships have their own picture galleries; thousands of schoolchildren also go to Young Pioneer palaces, which have all kinds of amateur activity groups, embracing everything from dancing to radio engineering.



So why the center? We know that children have dissimilar abilities. The center is for those who are exceptionally gifted. The concern that its staff shows for them is not limited to any particular aspect of artistic training; it is designed to bring out a child's calling. That is why the center, in addition to its painting studios, will before long have a children's theater with actors and stage directors between 8 and 15 years old as well as sculpture workshops and groups for architecture, ceramics, and native dressmaking; a public library; a movie house and a philharmonic society.

At present, the center has 12 branch offices in other cities and districts of the republic, and experience shows that you can find gifted children not only in the capital but also in remote areas. In addition to what I have already mentioned, the center is constructing an open-air theater and is designing an auto-racing track and a go-cart course. Clearly, that all takes money to install. Indeed, the investment in such projects has been running into millions of rubles since 1972, when the children's picture gallery was founded.

Q: The last question that, to judge by letters from SOVIET LIFE readers, comes from everyone interested in Armenian life is: What is the future of Lake Sevan? Can one be sure that this natural treasure will be preserved for succeeding generations?

A: Poets often call Lake Sevan the "Gem of Armenia." But it is not its beauty alone that matters. Perched at some 2,000 meters and with a surface area of over 1,400 square kilometers, Lake Sevan is of crucial importance for our water-poor republic. Sevan has 28 rivers emptying into it, with only one, the Razdan, flowing out of it, carrying its waters through a host of towns and villages into the fertile Ararat Valley.

It was decided more than four decades ago to step up the use of lake waters to irrigate thousands of hectares of arid land and to build a chain of hydroelectric power stations on the Razdan River. From the utilitarian point of view, that undertaking has proved to be well worthwhile: The lands irrigated by Sevan waters have turned into blossoming gardens, and Armenian industry has been advancing by leaps and bounds largely due to cheap electricity.

However, Sevan, having made Armenia rich in water, has itself begun to grow shallow. The volume of water in the lake has dropped by 24 billion cubic meters, its surface area has shrunk by 200 square kilometers, and the water level has sunk by more than 10 meters. It has become clear that the shallowing could become irreversible and lead to unpredictable ecological consequences.

So rescue work got under way. It was decided to build a 48-kilometer-long tunnel which, cutting through the Vardenis Ridge, was to bring the waters of the Arpa, a mountain river, into the lake. The project, which had to be constructed in extremely difficult conditions, took a lot of time and money. But it was worth the effort—in 1981 the Arpa came to Sevan's aid. The level of the lake soon stabilized although it may very well never regain its earlier high mark. And that would not even be advisable.

There are forests and orchards on the land from which the lake receded, a railroad line and a highway have been built, and so have boarding houses and beaches. The lake catchment has been incorporated in the Sevan National Park. Ichthyologists are replenishing the population of the famous Sevan trout. Specialists say that to restore the lake and its biosphere will require a five-meter rise of Sevan's surface area. So construction has started on two more tunnels that will let the Vorotan and Ghettic rivers flow into Lake Sevan.

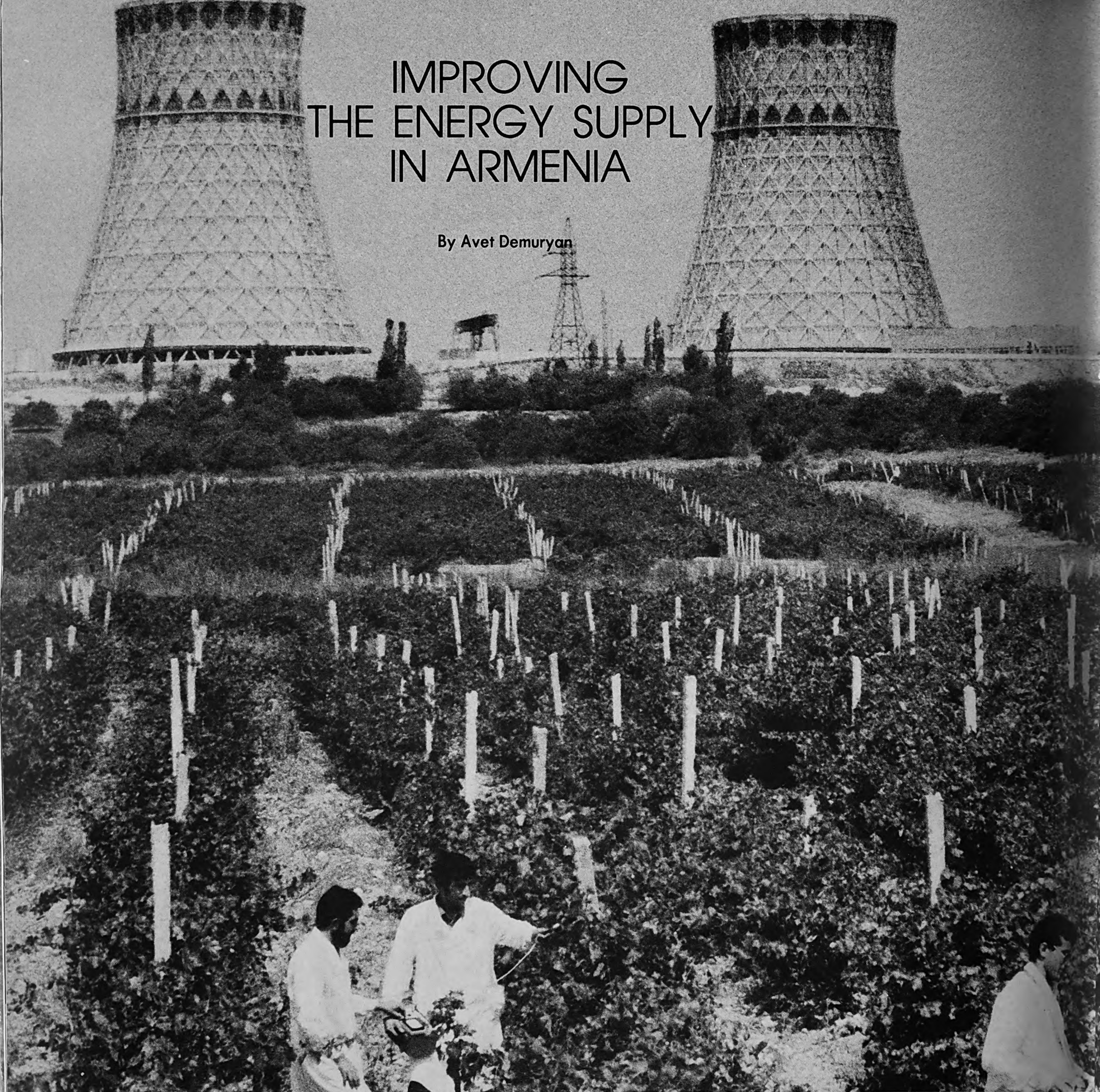
I think the people of our republic have no doubt today that Sevan will live on forever.

Q: What would you like to wish SOVIET LIFE readers?

A: I want to wish the readers of this magazine, as well as all Americans and their families, the best of health and prosperity, and a clear blue and peaceful sky overhead.

IMPROVING THE ENERGY SUPPLY IN ARMENIA

By Avet Demuryan



In 1985 power production in Armenia totaled almost 15 billion kilowatt-hours. More than a third of it was produced by the Armenian nuclear power plant, the first in Transcaucasia. Its first unit, which has a capacity of 400,000 kilowatts, started operating in 1976.

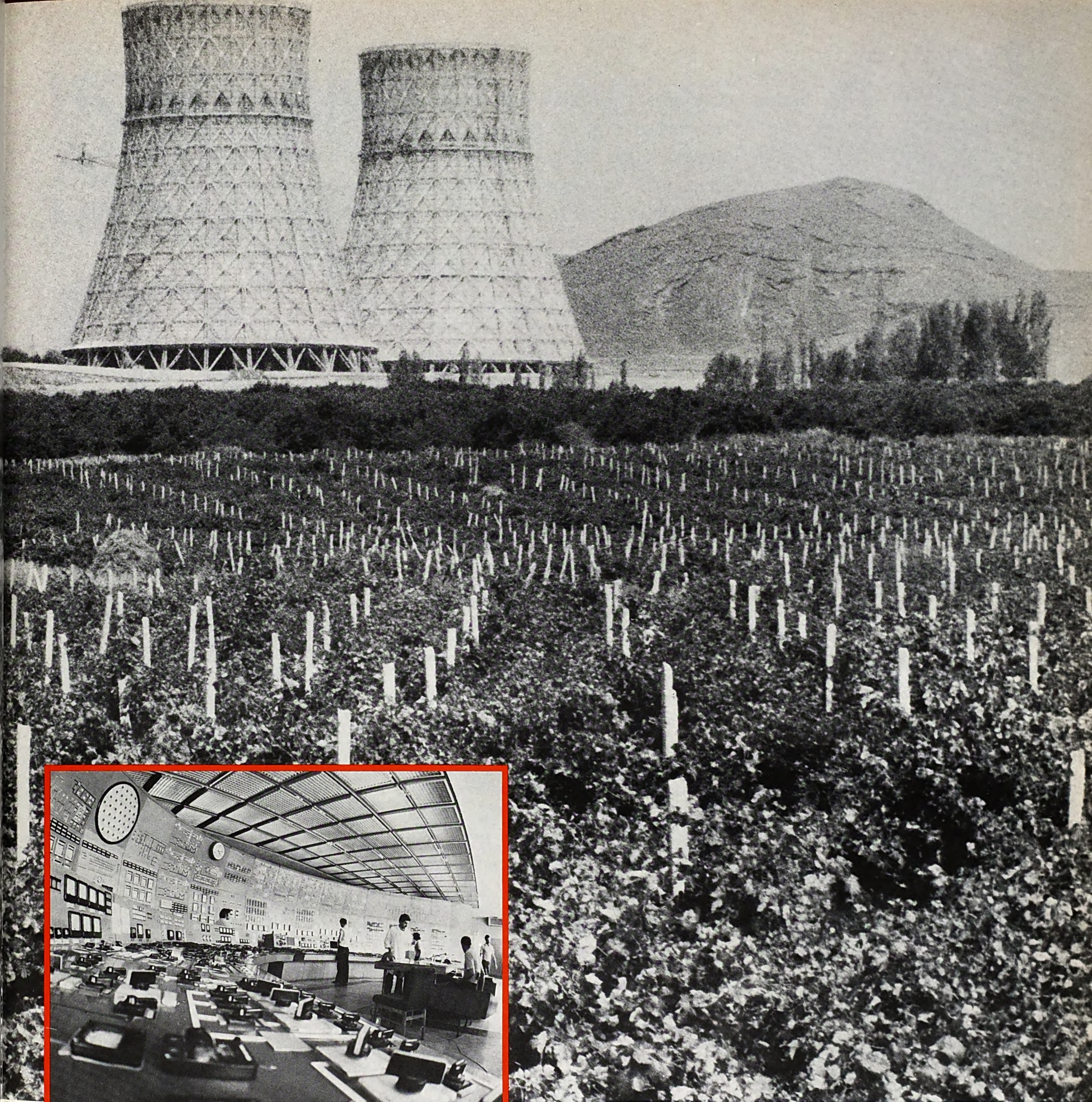
With Armenia's hydraulic and fossil fuel resources in short supply and the demand for energy of the republic's fast-growing industry and agriculture increasing with each passing year, the construction of that power plant was of fundamental importance.

Although the energy program of Armenia has been in effect since the mid-twenties, the shortage of power in the republic continued to be felt for some time, slowing down the development of industry. The lack of electricity also impeded raising the standard of living in the countryside. The government of the republic, having coordinated its proposals with the nationwide plan for electrification (adopted in 1920 and known as the GOELRO Plan), started the construction of what were large

power stations for that time. A hydroelectric power station was built on the Dzoraget River. A cascade of six others on the Razdan River followed.

In time, the strain on those stations from industry and agriculture, which were growing dramatically, was compounded by a serious ecological problem. As a result of filling the water demands of the Razdan cascade and irrigating the Ararat Valley, the water level in Lake Sevan began falling.

The first major changes in the Armenian power industry came in 1960 with the start of the construction in Yerevan and in other cities of thermal power stations. Surpassing in the next four years the aggregate capacity of all the stations built earlier, the thermal stations accelerated the construction of new plants and factories, boosting the republic's industrial potential. However, the construction of thermal power stations accentuated the problem of energy resources in the republic. Moreover, further increase in the number of heat and power plants in the republic was found inadvisable, not only because of the fuel-



The Armenian nuclear power plant is very near the lush vineyards in the Ararat Valley. Dosimetrists are doing a routine check. Left: Measuring the radiation of the reactor. Insert above: Control panel of Unit II.

supply problems but also for environmental considerations. This brought up the issue of a more effective energy source; experience led Soviet experts to the right solution: nuclear

The 10 years that the Armenian nuclear power plant has been in operation has proved its safety and reliability. It should also be noted here that notwithstanding the fact that the plant is located in a high-seismicity zone—which includes the greater part of Armenia—it has successfully survived several earthquakes, attesting to the good job done by the designers.

Permanent radiation control shows that the level of radiation in the area remains unchanged and does not exceed permissible limits.

The new stage in the development of the Armenian power industry in the next few years will mostly hinge on nuplex construction. Among other things, the Guidelines for the Economic and Social Development of the USSR for 1986-1990 and for the Period Ending in 2000 provides for the construction of the second stage of the Armenian nuclear power station. ■

In January SOVIET LIFE had a story about Rimma Fyodorova, a nurse in Pskov, a city 689 kilometers northwest of Moscow. Fyodorova was among the medical personnel who fought for the life of Joseph Lynn, an American who had a heart attack during his tour of the USSR. The editorial board came up with the idea of having the readers themselves interview Fyodorova. The idea appealed to our subscribers, so SOVIET LIFE correspondent Henrietta Repinskaya went to Pskov with a bagful of letters for Rimma Fyodorova.

RIMMA FYODOROVA ANSWERS SOVIET LIFE READERS

I want to begin by expressing my admiration for our American readers, who had many warm words for Rimma Fyodorova. The one most frequently used was "kindness." There are many kind people in the world, but Fyodorova's kindness is very special.

"What do you think of this pile of letters," I asked her.

"I am deeply moved by the attention and warmth of the American readers," said Fyodorova. "The letters contain expressions of thanks for Joseph Lynn, which means that the people who sent them are concerned for the well-being of others. They have so many nice things to say about me, too. It's very flattering and also a little embarrassing."

The letters contain a lot of questions. So let's get on with it.

"Were you born in Pskov?"

"Actually I was born in Pskov Region. My parents are farmers and live in the countryside. They are retired, but they keep a cow and poultry. The children all live in town. My sister works in a factory and my brother is a builder."

"Have you ever traveled from Pskov?" was another question.

"I've been to Moscow and Leningrad many times. I'm full of admiration for Moscow, but I love Leningrad. I traveled a lot during my years in college. I used to go on long walking trips. I was especially fond of mountain routes and traveled that way through the Crimea and Transcarpathia."

"Are you married?"

"No, I'm not, though I've been proposed to."

"Do you have many friends?"

"I don't think anyone has many friends. I have very nice acquaintances because I like to be among people and to be useful. That's why I have a lot of acquaintances with whom I keep in contact for varying periods of time. I have one good friend, and I have known her since the time we went to nursing school together. She works in the same hospital I do. Her name is Tatyana."

"What do your husband and/or boyfriend do?"

Fyodorova smiled and answered: "I have a boyfriend. He's divorced and older than I am. His working day ends earlier than mine, so when I get back from work, he's already waiting for me. I don't know exactly how I am going to arrange my future life. I am 30, and after waiting so long, it would be silly to rush into marriage now. This summer I'm going to the Altai to visit his parents."

"How do you spend your vacations?"

"I always go to the beach. Nothing can be better, in my opinion. I make the arrangements in different ways. Usually, it's the trade union that books accommodations at a hotel or boarding house. For a nurse who doesn't make very much money, that's important. Besides, it's very convenient because I don't have to worry about room and board. When I can't get a free trade union voucher, I go on my own and foot the bill myself."

"How would you like the idea of spending your vacation in California?" Mr. King Henderson of Sunnymead, California, asked. He pictures it so vividly to himself that he even describes how the language barrier can be overcome.

"That's rather far away. I'm afraid the trade union wouldn't pay my fare," said Fyodorova. "Otherwise, it's a wonderful idea."

"I'd like to thank Mr. Henderson," Fyodorova told

me. "But he'll probably come to visit Pskov because he writes: 'One of my ambitions is to travel the entire length of the Trans-Siberian Railroad as an ordinary passenger. It would be very interesting for me if I could spend some time at a Russian dairy. It would also be interesting to visit your factories, schools and museums, to tour several cemeteries where World War II dead are buried and to see some of the many towns and villages that were destroyed by the Germans during the war.'"

"Then he must come to Pskov by all means," said Fyodorova. "He would really appreciate its beauty. In 1944 it lay in ruins—the war didn't spare it."

You must have noticed, Rimma, that many of the letters contain reflections on peace. I think that William M. Kupec of New York was most eloquent on the subject. He writes:

"How nice it was to learn how helpful you were and how you transmitted feelings of warmth and compassion to an American patient. It becomes more significant when such feelings cross cultural lines and overcome the obstacle of a foreign language. Despite times of uneasiness which exist between our countries, you, a Russian woman, extended yourself with friendship, compassion and expertise in assisting an American. A beautiful person-to-person cultural experience."

"Your manner of creating positive personal relationships as an individual citizen are, I feel, as important as the efforts of our esteemed leaders at the summit," he continued. "How can we, as peace-loving citizens of our countries, contribute to a mutual effort toward this goal?"

Another letter asks: "How important is the peace question in your life?"

"I'm so happy that Americans are as much concerned about peace as we are," Fyodorova told me. "I think there is nothing more important than peace in the world."

"Mr. Henderson writes that he would like to visit the cemeteries where World War II dead are buried. I would like him to know that there is hardly a family in our country that has not lost a relative in the war. Fortunately, my father returned from the front, but he suffered from serious wounds. Two of my mother's brothers did not return. One of them was reported missing; the other died in a burning plane. My father's sisters starved to death during the siege of Leningrad. In our cemeteries there are tens of thousands of names of young people who died in the flower of youth to save the world from fascism. I want peace for all time in their name as well."

"I take back my words about there being few people you can call friends. When speaking of different countries, there should be many friends. The more the better. Because, as Samantha Smith said, friends won't fight each other."

"I think that we should get to know each other better and meet more often. We should at least know each other by sight. For instance, only yesterday I knew nothing about Roy Harrison of Santa Monica, California. But today I can almost see him. When he was in the Soviet Union in 1960, he wanted to see the mammoth found in the Siberian permafrost which was on display in a Leningrad museum. But as bad luck would have it, the museum was closed for repairs. Apparently, Roy had looked so disappointed that the receptionist wanted to know what was wrong. Though she knew no

English, she understood what the tourist wanted. She told the director, and he took Roy around the museum.

"I took such a liking to Mr. Harrison after that, that I would like to send him some post cards of Pskov. He and his friends will look at them and sort of get to know us."

You can easily send him the post cards, Rimma. Well, back to the letters.

"Do you have a wish that has not come true?"

"Yes. I wanted to become a doctor. After graduating from school, I tried to enroll at a medical institute, but I failed the competitive exams. Then I decided I would graduate from nursing school with honors, and I did. It's a pity I am not a doctor, but I am happy to be a nurse. I know that I would have been unhappy in any other profession. I'm really getting to understand people better and to feel real empathy for them."

"Is your hospital well equipped?"

"Yes, it is. I'm working on an EKG remote-control panel. We maintain communications with 20 hospitals in our region. It takes from five to ten minutes to get an EKG from a remote village or any part of the city. A cardiologist reads it immediately and, if necessary, holds a doctors conference. In another five to ten minutes we make our recommendations. If necessary, a group of doctors visit the patient. We get up to a thousand urgent calls a year."

"How much did it cost Mr. Lynn to stay in the hospital?"

"He was treated free of charge, like any Soviet citizen. The state subsidizes all health services. But it is quite possible to calculate how much the treatment might have cost Mr. Lynn. He stayed in the hospital for 56 days. Of these, he spent six in an intensive care ward where a bed costs from 10 to 11 rubles a day. Treatment, during the acute stage, comes to from 50 to 60 rubles a day. In the ordinary ward it is somewhat cheaper, but add to that the meals and the necessary tests and checkups and you get a sum that is in excess of a thousand rubles."

"I hear there is no prejudice and racism in Russia," writes one correspondent, and continues: "Is that true? If so, that is good."

"That is true. Our Constitution says that all citizens are equal, regardless of race and nationality. But the way I understand that, such ideas must not only be laid down by law but should take root in people's minds. I check myself the surest way there is: I ask myself whether I could fall in love with a man of another nationality or race, say, an Afro-American, and I answer—Yes."

My last question: "Which of the letters did you like best of all?"

"That's a very difficult question. Some of these letters express thanks and praise—that's very pleasant. In others the writers tell me about themselves, and I really appreciate their confidence. Still others are written in Russian, which is very touching. Mr. Ruben A. Franklin asked: 'O.K., Rimma. How was my Russian—bad or extremely bad?' I think it was beautiful, Ruben."

"There were other letters in which I felt the concern of their writers about peace and the desire to establish friendly contacts between people in order to safeguard our planet from war. I share their concern and their hopes with all my heart. I think these are the letters I like best."

HOMELAND IS ALWAYS HOMELAND

By Julietta Amirkhanyan

m

ore than a million and a half Armenians lost their lives in the 1915 genocide. The survivors of the bloody massacre fled to Russia and abroad. The Armenian communities scattered all over the globe

are known as the *spyurk*—an Armenian word that has no equivalent in other languages and so has been incorporated into them.

The world is vast, but each people has only one homeland. That is why *spyurk* communities have never broken their ties with the revived Armenia. Their contacts were not always broad and variegated, but the bridge between Armenians abroad and their native land was built in the earliest Soviet years. *Spyurk* communities helped the young republic financially. During World War II the Armenians fought the Nazis together with the entire Soviet people. Their *spyurk* donations were enough to pay for two tank columns and a number of planes for the Red Army. Sizable sums of money came from abroad, as well as parcels with warm clothes and medicines.

After the war ended, many Armenians were repatriated. In 1964 the government of the republic set up the Committee for Cultural Contacts with Armenians Abroad. It maintained ties with 400 communities the first year; now the number exceeds 10,000.

Here is what Karlen Dallakyan, its president, said about the *spyurk*:

"The founding of our committee was warmly greeted by *spyurk* communities. Everyone realized that it would help preserve Armenian culture and national awareness in the *spyurk* and would encourage Armenians all over the world to rally around the motherland. The committee helped many *spyurk* schools and colleges, charitable and other public organizations, the press and numerous community workers to establish ties with Armenia.

"One of the basic tasks of our committee is to acquaint the *spyurk* public with life in Soviet Armenia. We make it a point to present things realistically so that Armenians abroad will get a true picture of the country, of its successes and problems, its peace effort and its contribution to international cooperation.

"*Spyurk* communities now maintain contact with the motherland in a variety of fields. They conduct special tours for artists; exchange delegations of scientists, doctors, writers and journalists; and publish the works of *spyurk* authors in Armenia and of Soviet Armenian authors abroad.

"Every year six prizes are awarded in the Armenian Soviet Socialist Republic to people prominent in *spyurk* culture. Three were won by American's last year. The Khachatur Abovyan Prize, established by the Armenian Writers Union to commemorate the nineteenth century writer and educator, was awarded to Andranik Andriasyan, writer and public activist. The Armenian Academy of Sciences gave its Anani Shirakatsi Prize, named in honor of

the renowned Armenian philosopher and scientist, to Marjri Usepyan, writer, historian and community worker. The composer Alan Ovanes received the Komitas Award of the Armenian Composers Union, commemorating the celebrated Armenian composer."

This is what Sarkis Muradyan, head of the board of the Armenian Artists Union, told me:

"When I visited my compatriots abroad, the artists I met said time and again that the motherland was their inspiration and that ties with it provided creative stimulation for their work. I understand them perfectly. There is no genuine art without national awareness. In the past three years Yerevan, our capital, and Echmiadzin, the center of the Armenian Church, exhibited the paintings of Garzou of France and Khoren Ter-Arutiunyan of the United States at the Armenian Gallery of Art.

"We, in turn, often hold Armenian art exhibits for *spyurk* communities."

The enthusiasm of young *spyurk* Armenians for their motherland shows that the prospects for mutual relations are excellent. Silva Kaputikyan, the well-known poet, put it this way:

"For 30 years I have communicated with Armenians in the Middle East, France, Greece, Great Britain, Canada, the United States, Argentina, Brazil and Uruguay, and I know that all over the world our land, culture and language attract Armenians. The interest of the young people is especially inspiring. Many young people of the *spyurk*, regardless of their political convictions, have strong feelings for their motherland.

"I have many Armenian friends in the United States. I often write to them, and they write back. I know from their letters that the Armenian community in America watched the Geneva summit with keen interest and that it places great hopes for progress in Soviet-American relations."

Young Armenians from abroad have every opportunity to receive firsthand information about Armenia, visit it and even study there. Over a thousand Armenian boys and girls from many countries have graduated from Armenian higher and secondary educational establishments these past 15 years. It has become a tradition for *spyurk* children and adolescents to spend their summer vacations in the land of their forefathers. Last year alone, Armenia received over 200 children from 19 countries, including the United States.

Now a few words about Shakeh Varsyan, a celebrity with *spyurk* Armenians. She moved to Soviet Armenia when she was 18 years old, leaving her parents and friends in the United States. That was in 1946. She has since made a name for herself in literature, and in 1984 revisited the country where she had grown up with a group of educators working on a textbook for *spyurk* Armenian-language schools.

"I was pleased to see the revival of Armenian public life and culture in the United States," she said when her long tour was over. "There are more Armenian schools now in Boston, Philadelphia, Detroit, Los Angeles and New York.

"Contacts between Armenians abroad and their ancestral land have grown stronger and closer with the years. They are acquiring ever new forms and content to better serve the cause of peace and mutual understanding." ■



APPEAL OF VAZGEN I, THE PATRIARCH-CATHOLICOS OF ALL ARMENIANS

As our entire Church and its followers know, we have been offering our prayers and making consistent efforts for peace on Earth and for cooperation among nations and states.

We regard this as the insistent demand of the Holy Gospel of our Lord Jesus Christ and the demand of the tragic history of our Church and nation in past centuries.

For centuries wars hung like the sword of Damocles over our Christian people; our native land was trampled upon by a mighty enemy; our shrines, towns and villages were robbed and plundered; and our people suffered merciless martyrdom. We the sons of the Armenian Church and the Armenian people have known no fiercer and more hated enemy in this world than the seven-headed monster called war.

We have known no more desirable and respected idea than the evangelical behest of peace, than friendship and accord between nations, or creative cooperation between large and small states.

That is why we, as the first servant of our Holy Church, as the person who is responsible to history for our believing people, have been praying day and night, acting and calling for peace, for universal disarmament, for censure of wars as the gravest crime committed against humanity.

That is why in the past 40 years we felt relief and joy every time we heard from the rostrum of the United Nations or international conferences or from prominent leaders words for peace, for disarmament, for the resolution by peaceful means of issues between states. We are well aware that unless there is peaceful cooperation between states, it will be impossible to go on living in the world today.

That is why we have spiritually rejoiced and blessed the Geneva meeting of the leaders of the Soviet Union and the United States of America, regarding it as the providence of God's gift to the people of the planet. A new star has risen in the sky over Geneva, and our souls, which craved a new hope, again heard the sweet song of angels saying: "... and on earth peace, good will toward men."

That is why, filled with good will, religious leaders, statesmen, scientists and public leaders, whether in the East or in the West, have hailed the encouraging meetings in Geneva with gratitude.

That is why we welcome the latest statements by Mikhail Gorbachev, the leader of the Soviet Union, which propose that all types of nuclear weapons be eliminated before the end of the twentieth century. These statements are a triumph of the cause of peace and of humane ideals.

We want to call upon all religious leaders of our Mother Church and all our people to pray to God the Almighty and to make tireless efforts to protect the sacred cause of peace, to defend the cause of complete and universal disarmament. This is the only way to ensure a safe life for humankind.

Only in conditions of peace and cooperation among nations can a new life be ensured for our Church and for our nation.

"Blessed are the peacemakers: for they shall be called the children of God." ■

LIFE IN THE RAZDAN VALLEY

By Julietta Amirkhanyan and Armen Khanbabayan
Photographs by Vladimir Vyatkin



PROFILE OF A CENTURIES-OLD VILLAGE AND ITS PEOPLE



Schoolteacher Ambartsum
Kayayan loves to take
his pupils hiking in
the countryside around
Bzhni and share with
them his knowledge
and love of the
history and legends
of his native village.



There are many people in Bzhni who are over 90 years of age and three who have reached 105. Those who are only 70 or 75 are considered to be in their prime. It's hard to say to what the villagers owe their longevity—their tranquil life or regular physical activity, the pure mountain air or the mineral springs that gave the village its name (*bzhni* in Armenian means "medicinal water") and were probably the reason for its being settled in the first place. The villagers often get together to talk about old times. Kayayan has been toying with the idea of recording their conversations. He thinks that their memories of things past would fill a book and make the village and its inhabitants even better known.

B

zhni is a village in the very center of Armenia, 54 kilometers north of Yerevan, half-way up a mountain, between the blue bowl of Lake Sevan and the lush Ararat Valley. This is beautiful country—the Razdan River valley, mountains criss-crossed by numerous turbulent rivers, orchards and golden wheat fields. The vil-

lage has grown rich in recent years thanks to the earnings of the local state farm, which specializes in stockbreeding and horticulture.

The age of the village commands respect even in a land as ancient as Armenia. Bzhni was first mentioned in the fifth century chronicle of the Armenian historian Kazar Parbetsi.

Bzhni has gained wide renown for its mineral water springs. That's probably why people first settled here. A bottling plant has been built on the site of the springs, and millions of bottles of the water are sent to all parts of the country. Thousands of people take rest cures at the boarding houses and resort hotels built in the vicinity. The life of the villagers is closely connected with the plant and the boarding houses—one out of every seven able-bodied residents of Bzhni works at the mineral water plant or at providing for the comfort of tourists. The village has a total of 2,200 inhabitants.

Health-Giving Springs

Ambartsum Kayayan is a 60-year-old school-teacher who lives in Bzhni. A great patriot of the land where he was born, he knows everything about the history and legends of the area. This vivacious man takes pleasure in being a voluntary guide, and he is always ready to acquaint visitors with the past and present of his village.

"The ruins of 12 medieval churches and monasteries can be seen in Bzhni to this day," he says. "One of them, the Church of St. Sarkis, has recently been restored. Jean Chardin and Joseph Pitton de Tournefort, two French travelers of the seventeenth century, visited Bzhni and wrote about it."

Naturally, Kayayan speaks about the mineral springs, the pride of the locality. He says that specialists maintain that Bzhni water is as good as the famous waters of Karlovy Vary in Czechoslovakia and Borzhomi in Georgia.

Book of Reminiscences

It is hard to say whether it is the effect of the pure mountain air or the medicinal water, of their tranquil

life or their regular physical activity, but many people in Bzhni are over 90 years of age, and three are over 105. People who are only 70 or 75 are considered to be in their prime, not old.

The old people have a lot to tell the young ones. The local villagers are especially fond of listening to the stories of Armenak Galstyan, who was the liaison officer of General Andranik, the national hero of Armenia, during World War I.

Every day the old men get together to talk about the olden days. Kayayan has long been nursing the idea of recording these leisurely conversations. He thinks his notes would fill a whole book and make the village and its inhabitants even better known.

Three Generations Under One Roof

You can roam about the picturesque streets of the village and listen to the conversation all you want, but to really understand the life of the people, you have to visit their homes.

The two-storied stone house of Agaron Vartanyan, a 60-year-old peasant, cannot be considered typical no matter how much it looks like its neighbors. The point is that his home has retained the old tenor of life that is gradually disappearing. Three generations live there under one roof: the head of the house and his wife Yegrastan, and their two sons Gevorg, 31, and Gaghiik, 27, with their families. Agaron and Yegrastan have five grandchildren so, naturally, it's never quiet in the house. But they adore the youngsters and can't imagine life without them. It's not only the older couple who want to live with their children; the sons, too, are in no hurry to move into houses of their own, though they could easily do so. The young couples believe that the relationship between grandparents and grandchildren is a very special one, and they are pleased that their children are able to benefit from it.

Of course, having everybody living under the same roof has its inconveniences. For example, the dining room table at the Vartanyans had to be made to order. It's longer and wider than ordinary, and such large tables are no longer manufactured.

Four of the six adult members of the family go to work. Gevorg works at a dairy plant in the neighboring town of Razdan. Four hundred Bzhniites go to work every day in Razdan and Charentsavan, another nearby town. Agaron and Gaghiik work on the state farm; Yegrastan works at the bottling plant, while her daughters-in-law do the housekeeping and work in the garden.

"They make a considerable contribution to the family income," says Yegrastan. "The orchard and vegetable garden net from 7,000 to 7,500 rubles* a year. That's a very good addition to what the four of us earn. So we're quite well off."

*One ruble is approximately 1.24 dollars (U.S.) at the official rate of exchange.

"We Remain in the Village"

Though the younger Vartanyans have their mother and father to help take care of their children, there are many young couples who prefer not to live with their parents. A hundred new houses have been built in Bzhni in the past two years, and 70 of them were built by young families. Yakov Saakyan, the chairman of the Village Soviet, who has just turned 30 and understands the young people's wish to be independent, readily allots them plots of land and loans them money for building homes of their own. It's not only friendship that motivates him to do this; it's good business.

"Having a household of their own is a guarantee that the young people will remain in the village," explains Saakyan. "It wasn't so long ago that the village was chronically short of labor because a lot of our people were migrating to cities. The situation is changed now, and there are good reasons for that."

The local authorities use the same incentives for regulating migration as those in the other areas of the republic do. In the first place, Bzhni offers excellent conditions for developing personal holdings, and, in the second place, young people are spending their leisure in a more interesting and varied fashion. The village now has an amateur ethnic song and dance ensemble, a sports school and a movie theater. Famous performers, writers and artists are frequent guests at the local house of culture.

It's Easier to Transform Than to Build from Scratch

The majority of Bzhniites have cars. That's why even when they work in neighboring towns, they'd rather live in Bzhni.

Time flies, and what appears to be quite satisfactory today will be old hat tomorrow. That's why the chairman of the Village Soviet plans to continue improving living conditions in Bzhni. Among other things, there'll be a fine new building in the village in which wedding ceremonies will be held. Kayayan will also get a "gift"—his dream of a Museum of the History of Bzhni will come true. The chairman's plans for village improvement include even a beauty parlor.

The realization of these plans will take considerable effort and a sizable amount of money. The money, however, is evidently no problem since the income of the state farm makes it possible to earmark large sums for social needs.

"A lot depends on the enthusiasm of the villagers themselves," says Saakyan. "But, like myself, they believe that it's easier to transform Bzhni than to build it from scratch as our ancestors had to do. They raised the village from ashes many a time after the devastating raids of invaders."

Announcing a first for summer 1986...

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On board the modern cruise ship, the M/S Gorky, you'll enjoy personal discussions, meetings and special seminars with working Soviet journalists and authors. They'll talk about what's new in the Soviet economy . . . how the USSR approaches questions of peace disarmament discussed at the Reagan-Gorbachev summit and since . . . what the 27th Congress of the Communist Party means for Soviet living standards . . . and much more — all in a spirit of openness and good will. You'll gain valuable insights into the daily lives of Soviet citizens in a modern socialist society!

Also joining in the discussions will be Soviet diplomats and trade specialists who live and work in the United States. They will add unique *personal* perspectives to this exciting holiday voyage.

Of course, the cruise on the Volga is the centerpiece of this marvelous tour — but there's even more! You'll also see the famous sights of Moscow and Leningrad, including the Kremlin, Red Square, the Hermitage Museum, St. Isaac's Cathedral and much more!

There's yet *another* unusual feature of this tour. Immediately after the cruise segment, you will visit one of three capitals of Soviet republics for full sightseeing: Baku in Azerbaijan, Erevan in Armenia or Tbilisi in Georgia. The choice is *yours* — just indicate your preference on the Reservation Form when you send in your reservation deposit.

One final point. The M/S Gorky accommodates exactly 150 passengers. In view of the exciting itinerary, the unusual nature of the tour and its sponsorship by *Soviet Life*, we expect an enthusiastic response and a fully booked ship. So please don't let any time go by. Send in your reservation deposit of \$200 per person — you will have ample time to cancel if you must (details below). You'll enjoy an *unforgettable* holiday — reserve today!

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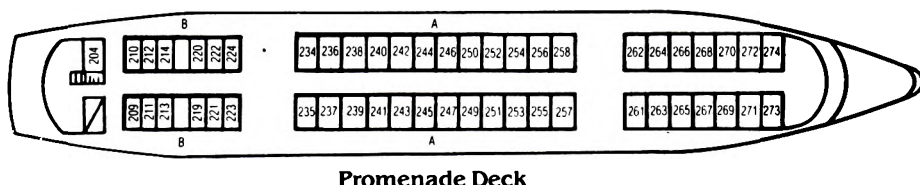
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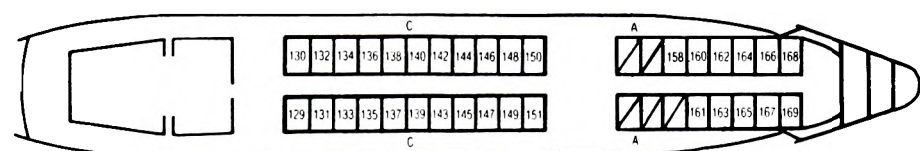
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BOTH ARTIST AND CRAFTSMAN

By Julietta Amirkhanyan

Benik Petrosyan works in many media. His metal chandeliers, statues, reliefs and stained-glass windows decorate buildings all over Armenia.



The sculptor echoed my question: "What's my cherished dream? I want to live long. I have lots of work to do to fulfill myself. You see, every artist's idea of beauty keeps changing with the years—as do his other ideas, his feelings, his favorite imagery and techniques, and—last but not least—the topics he chooses. However long you work and however many observations you make, you can't accomplish everything in this infinite world. So you've got to hurry."

Benik Petrosyan, 46, lives up to those words. In 1967, a year after he graduated from the Yerevan Theater and Art Institute, his first 22 statues were displayed in a park, demonstrating his master's hand in basalt and tufa, the traditional Armenian materials. Surprising as it may seem, he gave up stone carving almost at once, and his next exhibition, three years later, displayed bronze haut-reliefs only. His work on them was preceded by painstaking study of medieval miniatures in the manuscripts preserved at the Matenadaran, the ancient manuscript depository in Yerevan.

In 1972 he surprised the public at his next exhibition, this one in Yugoslavia (others were held in Canada, Japan and elsewhere), by his revival of another old Armenian craft, embossing, in 30 impressive bas-reliefs.

Another Petrosyan exhibition, in 1980, was again a sensation. That time well-rounded welded metal forms were the center of attention along with cast-metal bas-reliefs.

Last spring, Petrosyan took a two-month rest cure at a vacation resort for artists. Twenty-four fire-clay statuettes were the astonishing result of his holiday. His admirers were enthusiastic about the prolific sculptor's industry and originality. With the same taste and dedication he also makes lots of things to order. His metal chandeliers, stained-glass murals and windows, statues and reliefs decorate many offices, theaters, restaurants and hotels in Yerevan and all over Armenia.

Painting on metal and etching on glass are his latest passions. Though he has not given up his once favorite metal sculptures, he no longer welds them; he now prefers casting. His sophisticated techniques produce striking forms and textures hitherto unknown.

Always different and amazingly versatile, Petrosyan wants to try every technique under the sun. He is a contemporary version of the inspired artist-craftsmen of old.

NORAIR MURADYAN, THE GENIUS BEHIND SPITAK

The Spitak factory is the best ready-made garment producer in Armenia, which has an extremely efficient garment industry.



EVERYBODY who knows Norair Muradyan, the enterprising general director of the Spitak garment factory, says that the man can do anything and overcome any obstacle.

The factory is named after a tiny township, a suburb of Kirovakan. Until recently it was very old-fashioned. The only industry there was an imitation leather factory and a sugar refinery. Spitak is located in a prosperous agricultural district, with big villages all around. Of the numerous rural school graduates, many remained on the farms, but others were eager to live in town, where there was a variety of jobs to choose from. Employment offices were sure to offer three or four on the spot—in every town except Spitak. At least that's how it was until quite recently.

It's a universal problem. There aren't any interesting and well-paid jobs available in small towns generally. As a result, young people migrate to the cities. Kirovakan is a good example. It suddenly mushroomed, causing problems galore.

It's well known that the problems of big cities and small towns are intertwined and can be settled only in tandem, through mutual aid. So the authorities of Kirovakan decided to start a branch of the local garment factory, renowned throughout Armenia, in Spitak—on condition that the town independently tackle all issues concerning the new enterprise, which began from scratch. This in itself was a challenge, but the idea luckily occurred to somebody to put Norair Muradyan in charge. He was 33 years old at the time, and he was a native of Spitak.

Ten years after the Spitak factory began with 20 sewing machines, it exhibited its garments in Paris. Soon people were forming long lines at the Yerevan stores that carried the factory's products. These days nobody asks what the Spitak factory is—everybody knows it's the best ready-made garment producer in Armenia, which has an extremely efficient garment industry.

To everyone who asks for a job, Director Muradyan promises decent working conditions—a modest understatement. The conditions are excellent. The firm has several topnotch day-care centers, a sports and cultural center, and a concert hall. Many apartments are built for the staff, and the wages are the highest in the Soviet garment industry.

The firm's six factories and several rural shops supply work for more than 5,000 people. Now many of the villagers who left for jobs in Yerevan, Leninakan and Kirovakan are returning home. That's what Norair Muradyan has done for Spitak. He has examples galore to illustrate the doctoral thesis he is writing on labor resources.

DOCTOR'S GIFT TO HIS NATIVE CITY

By Armen Khanbabayan

"One day I felt I had attained my goal: My collection was one brilliant whole. 'What next?' I asked myself. There was only one solution: to present it to a museum. I did not aspire to found a new museum. I chose Yerevan because I know the esteem my compatriots have for the Russian language and Russian culture in general."

The museum known as Professor Abramyan's Collection opened in Yerevan two years ago, and it rivals the world's best art galleries. Its brilliant display of Russian paintings from the belle époque includes Mikhail Vrubel, Valentin Serov, Nikolai Roerich, Konstantin Korovin, Robert Falk, Alexander Benois, Kuzma Petrov-Vodkin, Boris Kustodiyev and other artists of no less renown—nearly 200 pictures, presented to Yerevan by Aram Abramyan, a well-known Soviet doctor, now 87 years old. A Moscow resident for almost 70 years, Professor Abramyan has never severed his ties with his native land. His latest act of devotion to Armenia won him the heartfelt gratitude of local art lovers.

Aram Abramyan was born in Tiflis, now Tbilisi, which was, at the time, the administrative center of Transcaucasia. At age 17, during World War I, he volunteered for the Armenian Corps to fight the Turkish Army. He fought in the famous Battle of Sardarapat in 1918, which routed the enemy.

Abramyan went to Moscow in the early 1920s to study medicine at the university. He took up urological surgery, attained the heights of his profession and founded a new medical school. He has many titles and awards. Russian art became his obsession while he was still quite a young man. It was then that he started his collection.

"I confined it to a definite period," Professor Abramyan says. "The turn of the century was a time of inspired artistic quest and dar-

ing innovation. I loved that period the most even when, as an undergraduate, I divided my days between university lectures and art exhibitions. When I began collecting, I wanted my private art gallery to be methodically arranged and, of course, valuable. From what I could afford, I always chose what I thought the best. I wanted my collection to reflect my own understanding of beauty."

One of the speakers at the museum opening ceremony called Abramyan the Armenian Pavel Tretyakov. There is an element of exaggeration, of course, in the comparison between the contemporary doctor and the famous patron of the arts whose enormous collection started Moscow's Tretyakov Gallery in 1892. But the speaker was essentially right: Professor Abramyan is endowed with the same refined taste and selfless patriotism.

I asked the famous surgeon what had prompted him to make a gift of his precious possession to Yerevan.

"One day I felt I had attained my goal: My collection was one brilliant whole. 'What next?' I asked myself. Was I to leave it to be scattered when I am no more? There was only one solution: to present it to a museum. To tell the truth, I did not aspire to found a new one. After all, Armenia abounds in museums—suffice it to mention the Armenian Art Gallery, with its masterpieces of Armenian, Russian, French, Dutch, Italian and Flemish painting.

"As to why I chose Yerevan, I think that's clear. It was not only because I am an Armenian but also because I know the esteem my compatriots have for the Russian language and Russian culture in general. Russian-Armenian contacts date back to the early Middle Ages. When you open an old Armenian chronicle, you are sure to come across references to the 'land of the Rus,' and vice versa. I am glad to have done my bit for that truly inspiring cause."



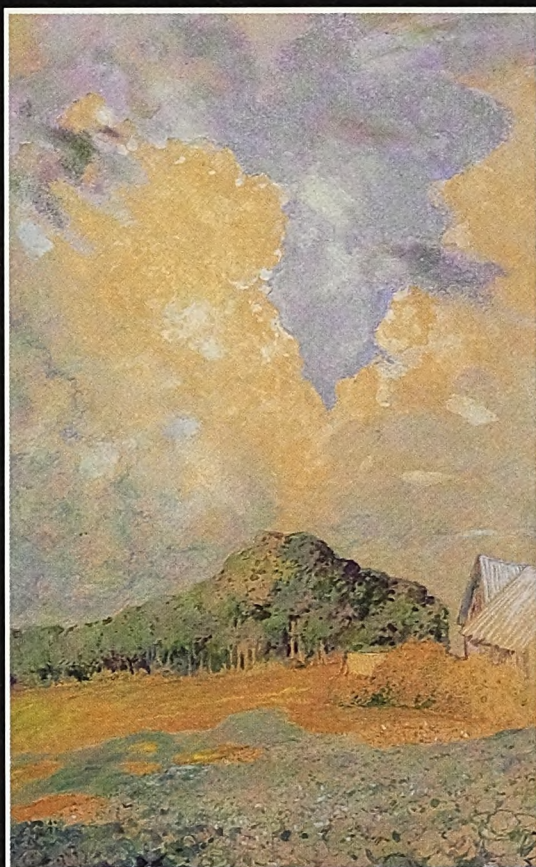
The Garden in Blossom
by Victor Borisov-Musatov.
Tempera on canvas
(50.5 cm. x 62 cm.).



The Pool at Versailles
by Alexander Benois.
Gouache on cardboard
(50 cm. x 65.5 cm.).



In the Theater
by Vladimir Lebedev.
Oil on plywood
(48.5 cm. x 38 cm.).



The Cloud
by Konstantin Somov.
Mixed media on paper
(72.5 cm. x 46.5 cm.).



Ballerina
by Zinaida Serebryakova.
Pastel on paper
(59 cm. x 45 cm.).



THE STARRY SKY IS FULL OF MYSTERIES

A VISIT TO THE
BYURAKAN
ASTROPHYSICAL
OBSERVATORY

By Vaagn Vasilyan



E

very time I visit the Byurakan Astrophysical Observatory, I recall the words of David of Sasun, the ancient Armenian philosopher: "Will cognition ever reach its limit if nature is infinite?" At the same time, I wonder how enduring traditional concepts are.

The conviction persisted until the late 1940s that the stars in our galaxy had existed since time immemorial and that their formation process had long ago stopped. Another widely prevalent hypothesis, expounded by the British astronomer James H. Jeans, put the age of most stars in our galaxy at about 10 trillion years.

Such ideas prevailed at the time that Victor Ambartsumyan, the now renowned Armenian astrophysicist, was just beginning his career.

A new era of cosmogony began in 1947. A revolutionary idea was born in the Byurakan Observatory, at the foot of Mount Aragats. Actually it started 10 years earlier with a discussion between Jeans and Ambartsumyan that was published in the British journal *Nature* and in the Soviet journal *Astronomicheskyy zhurnal*.

Ambartsumyan proved then that our galaxy was a thousand times younger, no more than 10 billion years old, and this truth is universally acknowledged today.

The next topic for discussion was the disintegrating stellar systems Ambartsumyan named "stellar associations" after he discovered them in 1947. The Byurakan staff proved that those associations and the stars composing them were fairly young. Ambartsumyan was thus the first to precisely spot centers of stellar development. The existence of stellar associations is proof in itself that the star formation process is still going on in our galaxy.

Ambartsumyan developed another sensational idea, that of protostars, supersolid formations in a state completely unknown to us. Scattered here and there in the universe, they explode now and then to disintegrate into stars, thus generating new stellar clusters. This means that stars evolve not from rarefied to solid states but in the opposite direction.

These and many other paradoxical ideas and hypotheses proposed by Academician Ambartsumyan—too many to enumerate here—give rise to heated discussions, opening new vistas before science and posing new tasks for scholars.

How Are Stars Born?

Interview with Victor Ambartsumyan, President of the Academy of Sciences of Armenia

Q: Your stellar formation concept was born several decades ago. Since then observatories in Byurakan and throughout the world have made discoveries galore, obtaining an amazing wealth of new data. Have any of them brought about any essential changes or refuted anything?

A: By no means. The views of my Byurakan crew have undergone certain changes, to be sure, but the available data again and again confirm our basic premises. At the same time, I should stress that we don't think them final.

Q: What are the latest results in studies of stellar development?

A: I can't answer that without reviewing the work of the past 60 years. It is clear even today that stellar developmental processes vary widely from stage to stage and differ in nature. It takes a lot of research to spot the general patterns. Still, many astrophysicists are inclined to think one hypothesis would suffice to settle the problem of star formation once and for all. That prevents them from taking into consideration the great variety of processes we observe. In fact, they are irritated by that variety, which cannot be squeezed into the procrustean bed of one simple pattern—at least that is my impression. The problem might be that observations do not give us direct proof of the supposed condensation of matter. All efforts to find direct proof of the concentration of matter in star-formation areas have been in vain thus far. On the other hand, observations have time and again demonstrated the reverse process, which shows that it predominates in the universe.

The opinion prevailed into the 1950s that our galaxy and others had gone through the major part of their lives and were well-balanced systems with only stable, moderate processes taking place. Astronomers considered the situation in galactic nuclei the same and thought that they consisted of star clusters and interstellar matter. Nobody hoped to find anything unusual, unexpected or mysterious there, so science paid little attention to nuclei. Nevertheless, even in the mid-1950s we came up with the hypothesis about galactic nuclear activity, followed by the hypothesis that galaxies had formed as the result of that activity.

I can't help digressing here. In 1952 the American astronomers Walter Baade and Rudolph Minkowski supposed that galaxies radiating powerful radio waves—so-called radio galaxies—differed in structure from other galaxies. They explained the phenomenon like this: Radio galaxies are produced by chance collisions of two conventional galaxies, hence the radiation. That viewpoint dominated for about 10 years, but we in Byurakan would not accept it.

Q: What do you now think of that argument with classical cosmogonists?

A: We were of the opinion that radio galaxies and their radiation were not produced by the collision of conventional galaxies. Radiation resulted from internal developments in a single galaxy, we argued, and radio galaxies were mammoth stellar systems in whose nuclei explosions had, to all appearances, taken place.

What do I now think of all this? In Byurakan we have long since realized that activities of the galactic nuclei take on widely varied forms, and powerful radio radiation is one of them. Today everybody is convinced that radio galaxies result from galactic nuclear activities, that is, inner processes, and they are studied as such.

Q: But you haven't explained why your viewpoint that all galaxies result from nuclear activities was in its time thought daring to the point of being fantastic.

A: When I came up with that idea, it could be seen as quite unconventional and daring. The theory boils down to this: Active nuclei contain huge clusters of very solid, perhaps supersolid, matter. They are conspicuous for their aggressive conduct. They exude gas flows, some of them condensed; they explode now and again to produce nebulae, star associations and, in the long run, new galaxies. The solidity of matter here and the huge masses and powers surpass all conventional ideas.

After quasars were discovered, our hypothesis no longer seemed far-fetched. It became clear that a galactic nucleus at the dawn of its existence may contain enough power and have enough matter-exuding potential to form structural parts of a galaxy—or of an entire galaxy, perhaps.

Observations of powerful explosions in galactic nuclei, and matter ejections and flows, which exude condensed and rarefied masses several million times exceeding the solar mass, proved us correct. Nuclei are productive formations. The data we have today allow us to suppose that some dwarf galaxies were exuded from the nuclei of giant mother galaxies.

Many theoreticians still think, however, that the many forms of galactic activity come second to condensation. We are sure, on the contrary, that power and matter ejection from the nucleus is the principal process, with the nucleus isolated at first and only later giving birth to a galaxy to surround it.

Q: The old theory of a stationary universe is a thing of the past. What is the current idea of the processes?

A: The universe leads a turbulent life. Variable phenomena form its basis. The metagalaxy is expanding apace. Huge explosions take place before our very eyes. The universe we live in is an unstable and emotional world—figuratively speaking, of course. I think its inconstant character has its roots in the fission, still going on, of primary matter endowed with colossal power. As soon as we penetrate the essence of nonstationary processes, I'm sure we will gradually discover the patterns of formation and development of variable structures. Hence the hopes we place on studies of superassociations, which began in Byurakan and are now the center of attention in many observatories all over the world.

Classical cosmogonists are still sure, however, that the endless universe can be understood and explained on the basis of the principles we know today—as if it has no riddles and surprises in store for us.

Q: What part did cosmogony play in the lives of our ancestors? What is being done to penetrate the mentality of several thousand years ago? After all, archeology is about one thing only: how humans have become what they are now, and how thinking started and progressed.

A: Our ideas of the past were drastically changed in the mid-nineteenth century as cave drawings were found in many parts of the globe. It became clear that astronomy, and particularly cosmogony, had been born in time immemorial. Our ancestors were far closer to nature than we are. The star-studded sky was to them far more impressive—not only because it was enigmatic, but because they observed many phenomena, like its daily rotation, with the same planets regularly appearing in the night sky. People had to find their bearings in order to know what time it was and when the seasons came and went. And the heavens, with their stars, helped there. Though primeval people knew nothing of the nature of the celestial bodies, some empirically discovered cosmic regularities gave them ample food for thought and hence definite ideas of cosmogony and cosmology. This gives us ground to say that the new branch of science, archaeoastronomy, is an interesting and promising discipline on the border of archeology and astronomy, even if it is rather far from the latest trends in astronomy and is much more closely connected with mythology, folklore and calendar studies.

Q: Do we now possess enough information to explain all the mysteries of the universe? Can new regularities of nature be discovered?

A: The road to the secrets of the universe is long and tortuous. In the final analysis, our idea of galaxies formed by their active nuclei is only a tiny step. We still have no general and finite theory of the origin and evolution of the universe, and it's not likely that one will spring up on the basis of the concepts available in contemporary physics.

I do not rule out the possibility of another revolution in the natural sciences similar to those started by the discoveries of the theory of relativity or quantum mechanics. I think astrophysics will become the leader in the natural sciences in the twenty-first century. ■

CONGRESS DELEGAT

The Twenty-seventh CPSU Congress took place in Moscow between February 25 and March 6. Four of the Armenian delegates were interviewed by a SOVIET LIFE correspondent. They were asked three questions. Their answers follow below.



Gemma Ananyan, 54, is First Secretary of the Idzhevan District Party Committee. She is a philologist who became a party functionary. She has held elective posts for 27 years.

1. On the whole, our district completed the tasks set by the Eleventh Five-Year Plan period (1981-1985). I think we are also starting out well on the next plan period, which will last until 1990. Our local economy is closely tied with the Yerevan-Razdan-Idzhevan Railroad, which began functioning in the last five-year period. In the current plan period it will stretch farther north to shorten the route from Armenia to Azerbaijan, Georgia and Russia. The railroad will benefit not only transportation but life in general in our district.

Now, for acceleration. We have set up a Coordinating Council for Progress in Science and Technology under our district party committee to pool the efforts of enterprises and their party organizations. The first results are here for all to see: The Idzhevan Carpet Factory is being reequipped, and collective and state farms are switching to intensive agriculture.

The district agro-industrial amalgamation, responsible for all issues related to the rural economy, has introduced an automated control system with the help of specialists from Yerevan.

2. Technology is O.K., but the human factor is by far more important. There was a good reason for the Congress to discuss it in such detail. We had never overlooked it before, either. In the last three years more housing, cultural centers and sports facilities were built than in the preceding 10. Still, we'd like our social program to be more effective.

The personnel issue has a direct bearing on the human factor we're discussing: Dynamic and creative people will be given more elbowroom. Party units in our district try to elect just such people to lead them, I'm glad to say.

3. What I especially liked at the Congress was its sober and critical assessment of the problems we are facing. That was a truly communist approach.



Bavakan Mnatsakan, 31, is a team leader at a state farm in the village of Arshaluys, Echmiadzin District. She is a deputy to the USSR Supreme Soviet.

1. To tell the truth, some of my fellow villagers at first took the word "acceleration" with a grain of salt. A farmer takes time before he gives his opinion on anything. No wonder. Nature, on which we depend so much, has taught us to beware of hasty conclusions. Rashness doesn't help in rural life. But we can no longer afford to mark time before switching to new work methods.

Acceleration has many aspects, and they are all intertwined. One of the crucial problems is to take a scientific approach to farmwork. If we want to raise good crops, we have to fulfill the requirements that agricultural science and agrochemistry demand of us. Fields have to be irrigated on time, and work has to be mechanized as much as possible. That's the only way to guarantee success in agriculture and, as a matter of fact, in the entire Soviet economy.

We already see some of the effects of restructuring the economy. Agricultural management, for example, is becoming more flexible. State and collective farms are more independent than before, and remuneration for work has improved.

A lot depends on the farmers themselves, on their discipline and responsibility for the work they do. A change in mentality is, perhaps, the main thing, and the sooner we achieve that, the better.

2. We are witnessing major changes in the distribution of material incentive funds. The recent resolution of the CPSU Central Committee and the USSR Council of Ministers on further perfecting economic management in the country's agro-industrial complex envisages steps to dramatically improve remuneration and make us more responsible for the end results of our efforts.

The vegetable-growing team I head was earning a lot even before the resolution was adopted. We'll be even better-off now, I think, provided we work well.

3. The Twenty-seventh Congress was a landmark in many respects. That's not only my opinion; everyone thinks so. We're getting rid of obsolete ideas and we're glad of it.

And something else. A great deal was said at the Congress about more privileges for working mothers. I can't help but welcome that—for personal reasons.

ES HAVE THE FLOOR

1. How does the resolution on accelerating the economic and social development of the country manifest itself in the life and work of the people you meet every day? 2. How does it affect your job? 3. What impressed you most at the Congress?



Benjamin Tumasyan, 60, is director of the Luis (Light) Industry Amalgamation. He started there 35 years ago as an engineer and has been managing his plant for 12 years now.

1. An intensified economy requires that we all have a clear idea of the prospects ahead and be able to tackle the major, strategic tasks. These depend chiefly on the work of our special design bureau, which uses practically every production section as its experimental base. The bureau's effort is oriented toward anticipating production tasks. That's acceleration for you!

We are replacing obsolete machines with the latest equipment throughout the amalgamation. Electrical appliances, our specialty, are produced on conveyors that are served by robots and manipulators wherever possible. Many workers have to be trained to control them, so we have bought a special-purpose production line, what you might call a training conveyor.

2. We feel the results of the current reform in the better remuneration for creative efforts. The wages of prolific inventors among the engineers and technicians have been raised by 50 per cent, and among the shop workers by 80 per cent. Blue-collar and white-collar workers who save considerable materials are entitled to bonuses equal to half the cost of what they save.

On the other hand, management has been paying more attention than ever to the working and living conditions of the staff. Everyone who applies for hotel accommodations for their vacation is sure to get them. There are no longer any problems with summer camp vouchers for the staff's children. We observe democratic principles unfailingly. For example, the distribution of incentive funds and allocations for social and cultural programs must be approved by the entire staff at a general meeting.

3. What struck me most was the businesslike and constructive atmosphere at the Congress. The political report of the CPSU Central Committee impressed me too, including the part on international relations, especially the proposal "On the Formation of a Comprehensive System of International Security." That's a clear-cut and universal peace program.



Nazik Stepanyan, 28, is a shoe cutter at the Masis Footwear Factory, which is situated in Yerevan, the capital of Armenia. She is a member of the Yerevan City Council

1. The Congress criticized the work of our light industry, pointing out that its output is sometimes still below the mark. My firm rarely comes under criticism; Masis practically leads the Soviet footwear industry. We make almost no defective footwear, and many models have received awards for their high quality. We know that our products are also appreciated abroad because we have a good foreign market for our footwear.

According to today's standards, there's nothing left to be desired. But that isn't enough. We may fall behind tomorrow's market demands, and our shoes may go out of fashion.

We often hear that Soviet goods should be up to the highest world standards. But why do we have to follow world standards instead of establishing them? Why not work in such a way that foreign firms try to emulate us?

I'm not building castles in the air. I've been with Masis for over 10 years, and I know what our staff is capable of. We have topnotch designers and shoemakers, all highly efficient and with excellent taste. We can and must perform even better than we're doing.

There's plenty of room for improvement of our production techniques. And something else: What we want is the enterprising spirit and more consideration for market demands. It's true that our equipment has to be updated, but it's even more important, as I see it, to update our mentality. An innovative approach to business is what counts most now.

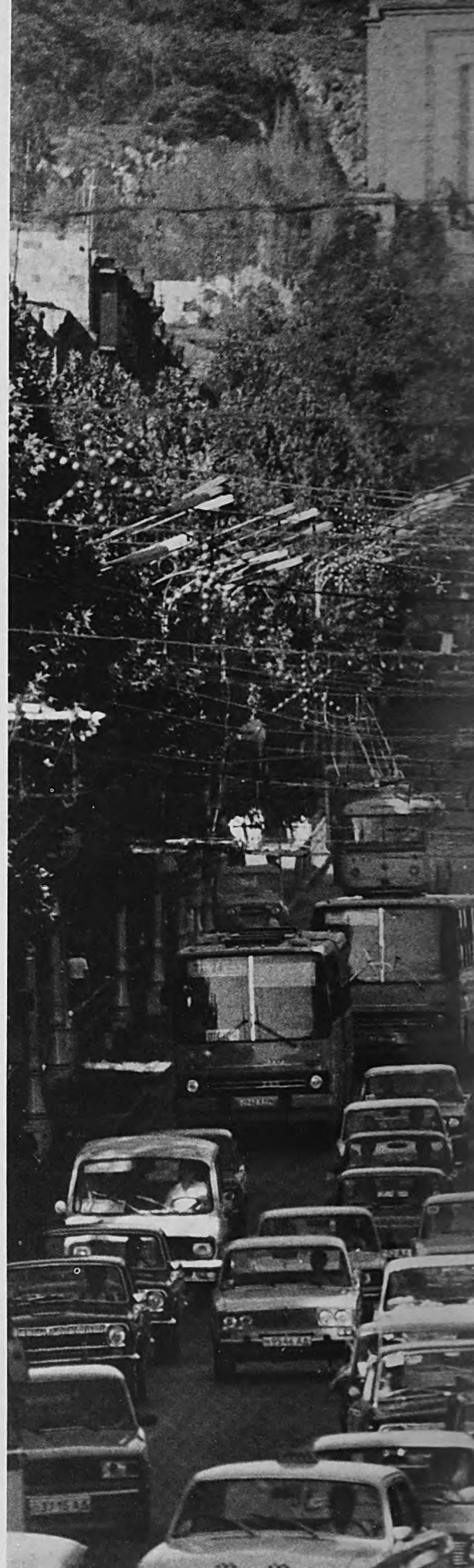
Last year the firm produced 20 million pairs of shoes, and we intend to make it 28 million this year with a wider assortment and top quality.

2. We can see the effect of the reform in the increased moral and material interest of the staff in the end results of the work. A lazy worker could hide behind his or her colleagues before; the status and wages of those who worked well and those who worked any old way were equal. That's out of the question now. Everybody's performance is evaluated and remunerated on individual grounds. And if you are stimulated to work better, that's just what you do, and you get paid accordingly.

3. I can't give a short answer to that. First of all, I was impressed with the Soviet peace strategy worked out at the Congress.

If only the other powers shared our position on crucial international issues, mankind would meet the new millennium in a nuclear-free world.

I want to believe that's how it will be.



things of that nature. We are placing greater emphasis on features typical of a southern city and compulsory for new housing projects: courtyards that encourage contact among neighbors, spacious terraces and balconies.

QUESTION: How do the local architects imagine a Yerevan district of the year 2000? I suppose they have developed some draft projects, haven't they?

ANSWER: They have indeed. Some of their projects are already being implemented. The projects were devised with a fuller awareness of the interests of groups of different ages and professions. The new residential areas will have a greater variety of houses. For instance, some of the apartment blocks will be built on terraces, in cascades.

QUESTION: So far as I know, there isn't much room left for Yerevan to expand. Does it mean that it will grow upward, at least its center, like so many Western cities, and turn into a city of skyscrapers by the year 2000?

ANSWER: You're right about there not being too much room left for housing construction in Yerevan today. Still, I don't think we'll start building skyscrapers. It would be inconsistent with our national tradition and landscape. The new apartment buildings will probably be no higher than 16 or 17 stories. We'll try to make up for the lack of space by building underground terrace levels for department stores, cafés, travel agencies and all kinds of service facilities. We've already done this in many parts of the city. We plan to continue with the "underground urbanization" of Yerevan. We'll also go on building the second stage of the Yerevan Metro.

QUESTION: Is it right that a greater Yerevan project is now being considered?

ANSWER: That's true. Greater Yerevan will include the city proper and the adjoining satellite towns.

QUESTION: Environmental protection is not a new problem in Yerevan, which



is a major industrial center. Will the new comprehensive program of the city's development deal with that problem too?

ANSWER: The ecological situation in Yerevan is not simple. That's because of the city's geographic location, the climate, the rough terrain with marked differences in altitude, not to mention the effect of industry on the environment and the rapid (until recently) growth of the population, which now totals about 1.2 million.

QUESTION: How do you deal with this problem?

ANSWER: The municipal council has stopped the production of some goods whose waste products pollute the environment. Seventy industrial enterprises in Yerevan are building purification facilities of their own, and some of them are already in working order. Besides, we intend to build a city facility to store and detoxify industrial waste in the wilderness of Ararat District. A city facility for biological purification of effluents is already functioning. It serves the needs

of the whole city. In the next few years the city gas stations will be selling lead-free gasoline. The exhaust fumes of cars running on such gas are much less toxic. Besides, the green areas in Yerevan will also be extended.

QUESTION: All of the above-mentioned measures will surely require immense funds. Does it mean that the municipal council is likely to face a financial crisis?

ANSWER: That is absolutely out of the question. All of the funds necessary for the implementation of the program of Yerevan's development for the period from 1986 to 1990 have been figured into the plan.

QUESTION: How do you imagine Yerevan in 2000?

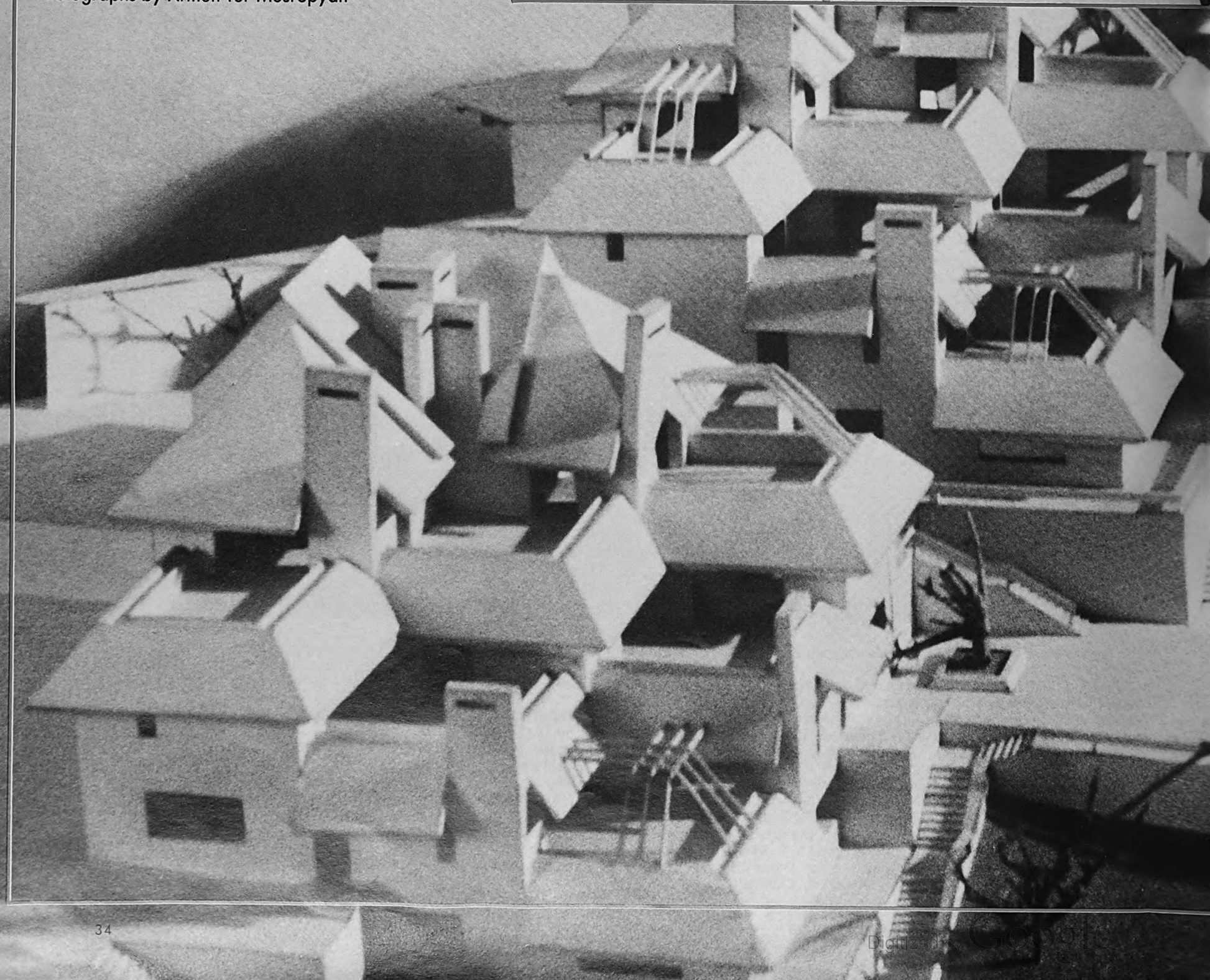
ANSWER: I imagine it as a city that will fully preserve its national character and become a model of culture, in every possible meaning of that word. I see it as a city in which it will be easy to live and breathe. ■

GRAND PRIX TO ARMENIAN ARCHITECTS

A SPECIAL
PROJECT
FOR THE TOWN
IN THE
MOUNTAINS

By Gevorg Oganessian

Photographs by Armen Ter-Mesropyan



A

by a common idea: "New Concepts in the Field of Mass Housing Construction."

"My colleagues Ashot Mkrtychyan and Grachya Sogoyan and I presented our project, which is a

Armenian architects won the grand prize of the Third World Biennial of Architects held in Bulgaria in the summer of 1985. The distinguished jury of the Biennial chose their project out of 460 entries presented by 36 countries. Architects competed in all trends of modern architecture, but all their projects were united

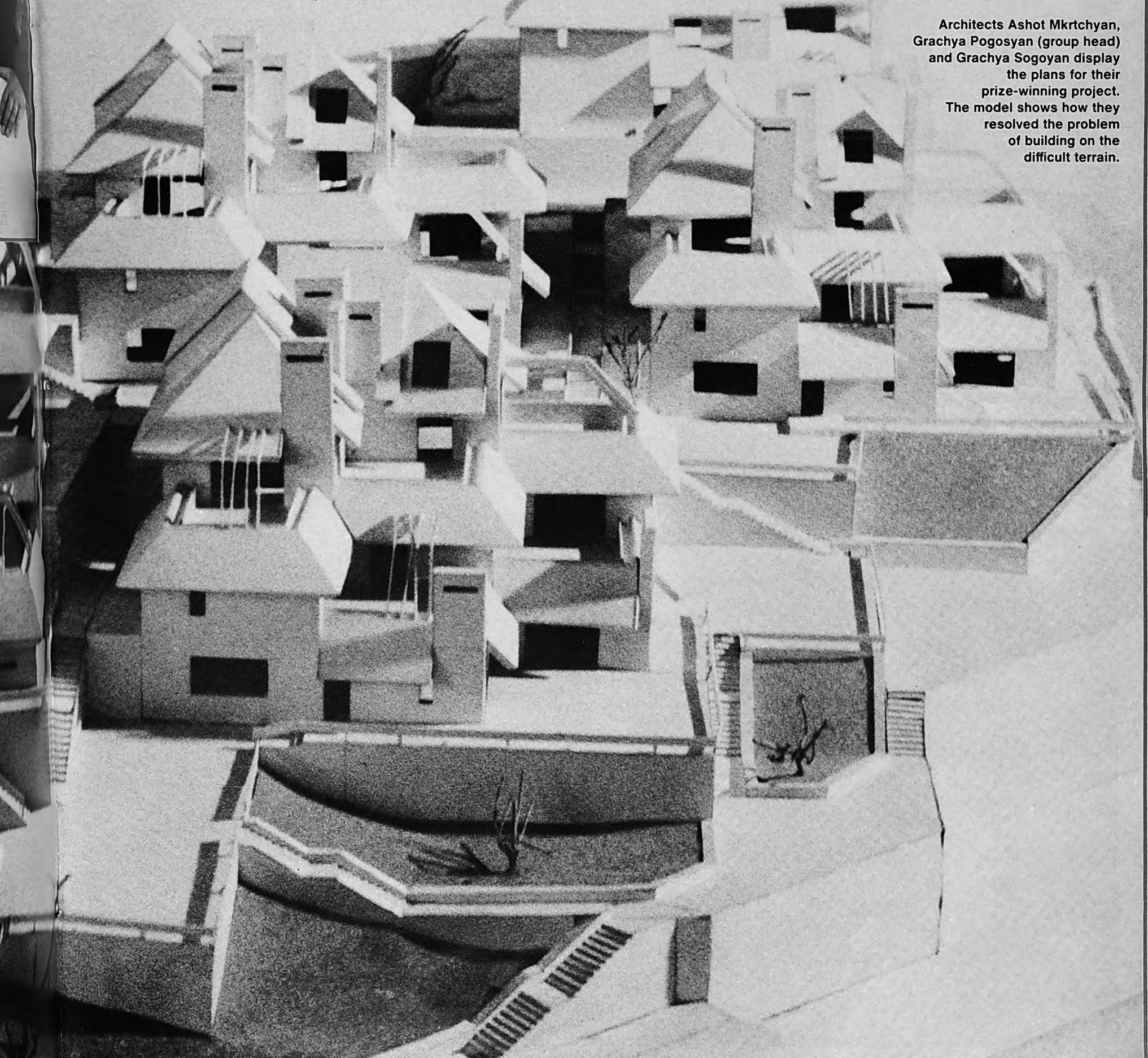
new residential area in the town of Goris situated in rough, mountainous terrain," said group leader Grachya Pogosyan. "Because the local landscape is complicated, we thoroughly studied regional traditions of planning and construction and finally arrived at a pretty unorthodox solution for the entire project."

Armenian architecture has had a style of its own throughout its entire history, and its tradition has always been stable. It prevails even in our times, in the age of standardization and mass planning. One can cite many examples of it.

The new district, whose construction is now under way, consists of 18 four- and five-story buildings located on mountain slopes. Every house is built in such a way that in combination with the others it forms a step of a terrace: The roofs of the houses below serve as balconies for the apartments situated on the level above. The architects linked the buildings with staircase "streets," a technique that allowed them to provide a separate entrance for every family. In front of each apartment the architects planned a little yard where residents can plant trees and build a patio and a metal pergola for the grapevine that is traditional in Armenia. The new residential area in Goris is, in fact, a self-sustained minitown with its own cafés, its own shops, a child-care center and other facilities.

The first three houses in Goris are already occupied. In the next two years 450 more families will move into new apartments there.

Architects Ashot Mkrtychyan, Grachya Pogosyan (group head) and Grachya Sogoyan display the plans for their prize-winning project. The model shows how they resolved the problem of building on the difficult terrain.

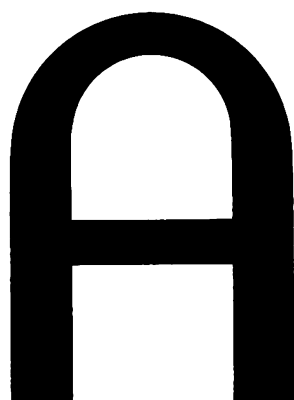




ACROSS WOODLAND ARMENIA

By Alexei Flerovsky
Photographs by Yuri Somov

LENINAKAN, ARMENIA'S SECOND LARGEST CITY



Armenia is a land of stone. Yet, it has a spot, and quite a big one at that, where the mountains are covered with dense woods. It is a place where crystal-clear rivers run down the cliffs and spotted deer graze in sunny clearings. This landscape, unusual for Armenia, begins immediately outside Leninakan, the second largest city in the republic. That is the place where our special correspondents Alexei Flerovsky and photographer Yuri Somov started their tour of Armenia.

Below: Emil Kirakosyan, chairman of the Leninakan City Soviet (a post similar to that of mayor) for the past 10 years, previously was director of a bicycle plant, where he also worked as engineer and foreman.



A Little Younger Than Babylon

The residents of Leninakan are not averse to boasting, but when they tell you that their city is only a little younger than Babylon, you can take their word for it. In any case, the first recorded mention of the predecessor of the city, a settlement called Kumairi, goes back to the year 773.

Kumairi was a flourishing town until the Persians plundered and burned it to the ground. After that the invasions of an assortment of conquerors were repeated again and again.

By the beginning of the nineteenth century, it was no longer a town but a sprawling sleepy village that "woke up" when a stream of Armenians returned from neighboring Turkey. There were peasants and merchants among them, but the majority were craftspeople—enterprising men who had a trade at their finger tips. The village grew rapidly and once again became a town. Whole streets of blacksmiths, stonemasons, weavers, shoemakers and carpenters grew up one by one.

At the end of the nineteenth century, the residents called the town Alexandropol. It was an organic blend of Oriental and European architecture. In keeping with the plan drawn up by Russian topographers, broad avenues stretched outward from the central squares, while the outskirts remained spontaneously Oriental, with a labyrinth of narrow little streets.

Alexandropol became the district center, and there was no longer anything provincial about it, and not because it was third in significance in Transcaucasia, after Tiflis, Georgia, and Baku, Azerbaijan. Alexandropol became a center of Armenian national culture on a par with Yerevan. An Armenian drama theater opened there in 1865 and after that an opera studio, a print shop and numerous artists' and sculptors' workshops.

Curiously, in 1913 Alexandropol outstripped Yerevan in population though the latter had higher status because it was the regional center. Alexandropol had 32,000 residents while the number in Yerevan was 2,000 less.

The rapid growth of Alexandropol, which was renamed Leninakan in honor of Vladimir Lenin in February 1924, occurred in the late twenties and the early thirties when the whole country was going through a period of rapid industrialization. Large industrial enterprises, like the textile mill, a giant for those times, were built; incidentally, to this day it remains the largest textile mill in the Armenian Republic.

Leninakan had 70,000 residents by 1939. The city continued to grow after World War II but couldn't keep up with Yerevan, where a third of Armenia's population resides (1,133,000 out of 3,340,000 as of 1985). Nevertheless, it remains the second largest city in Armenia, with a population of about 220,000.

The Concerns of the Mayor

Emil Kirakosyan, the mayor of Leninakan, is 51 years old. He has been the city head for the past 10 years. Before that he

was the director of a bicycle factory where he had been worker, superintendent, shop manager, chief technologist and chief engineer. The deputies to the City Soviet, who elected him chairman of the City Soviet, believed that an efficient director who was equally good at tackling production and social problems was the most suitable candidate for the mayor of an industrial city. They elected him once, and after that they reelected him three times. The office is honorable but far from quiet.

What are the problems that worry the mayor? What to build and where. Until recently, the city spread out into the steppe. Its residential areas stretched for 26 kilometers. But now it has reached the collective farm fields, so there's no place to go but up. The architecture of the new high-rises will not clash with the historical center of the city. The avenues here are adorned with six-storied buildings made of the famous tufa, which means that they are practically indestructible. The taller buildings—16 stories and higher—will go up only in the new sections. There are no plans to do any industrial building in Leninakan, and that means that the population will not grow much. The city is expected to have no more than 300,000 residents by the year 2000. Kirakosyan believes that that is the ideal size for an industrial city if it wants to avoid, or at least to allay, the negative consequences of urbanization and the concomitant pollution of the environment, traffic jams and unbalance between industrial and cultural development.

The majority of the population—206,000—are Armenians, the other nationalities being: Russians, 7,000; Ukrainians, 1,200; Azerbaijanians, 300; Georgians, 143; Jews, 55; and others.

The Budget

When the City Soviet decides on a multimillion-ruble undertaking at one of its sessions, the people of Leninakan know that it won't affect their finances. Taxes levied on the population form a mere 1.6 million rubles of the city's annual 40-million-ruble budget. The figure is stable. The lion's share of the money comes from the enterprises (turnover taxes and deductions from profit), which contribute about 60 per cent. The sum that the city gets from the republic's budget increases with every year and amounts to from 8 to 10 million rubles.

Income and expenses balance. "We live according to our means and don't borrow," said Kirakosyan.

The City Soviet spends an annual 35 million rubles on housing, development of health services, the economy and cultural facilities and less than a million on municipal management.

Actually, a lot more money is spent on the development of the social infrastructure of the city than is evident from the budget. The local enterprises make substantial contributions to that. The City Soviet carries out its largest and most expensive projects with contributions from the enterprises. For instance, it is now building a new residential area in the Gyumri Gorge. The mayor says the housing project will offer far greater comforts than the previous neighborhoods and will blend organically with the surroundings.

Another project that the City Soviet will not be able to carry out completely on its own is the establishment of a historic preservation area in the center of the city that will include more than a thousand restored monuments.

How does the mayor manage to come to an agreement with the leaders of enterprises that are not subordinate to him? He doesn't depend on political clout and personal charm alone, does he?

"No, I have to use other methods as well," Kirakosyan agreed readily. "The City Soviet has reliable incentives. In the first place, it is increasingly gaining full authority over its territory. No one can do anything without its consent. In the second place, the majority of the managers of large enterprises are themselves deputies and active on one or another of the City

Facing page: The Agartsin Monastery, built in the eleventh through the thirteenth centuries, is one of many historical monuments near Dilizhan, east of Kirovakan. The monastery stands on the slope of the deep wooded gorge of the Agartsin River.

Soviet's commissions—economy, housing, environmental protection, and so on. They can't violate the proposals they have voted for, can they?"

The mayor did not cite the third reason because it is taken for granted, namely, that all of Leninakan's residents are devoted to their hometown. The manager of an enterprise who is indifferent to an undertaking that will benefit the whole city will get no sympathy, not even from his family. It's another matter that every new project arouses heated discussions at the sessions of the City Soviet, and it depends on the majority of the deputies whether it is adopted or rejected.

It seems to me that "acceleration" is the most widely used word among executives today. Applied to Leninakan, it means that in the Twelfth Five-Year Plan period (1986-1990) the emphasis here will be on the all-round intensification of production, a rise in labor productivity achieved by implementing new technologies and improving old ones. The standing commissions of the City Soviet are also active along this line.

Naturally, for the City Soviet, as for the other city organizations, production problems are inseparable from social problems. Speeding up the social development of the city should create considerable changes in the coming five-year period in health services, catering and housing. The emphasis will be on more comfortable apartments for which the residents pay only the monthly rent.

In conclusion, Mayor Kirakosyan said that the problems they are tackling are not easy but that they are solving them step by step. "Everyone understands that we are working for a new quality of life."

The Town and the People

Two days in a strange city is not enough time to know it properly, and yet you can get the feel of its character by the things that immediately strike your eye.

Though there is a lot of construction going on in Leninakan, the city retains its historical image. The new residential areas with their towerlike buildings do not distort its appearance because the center remains intact. The only change is that it is growing more attractive. Wherever you look, you see how carefully the restoration work is being done. That goes even for the little side streets with their individual homes where the owners themselves have taken on the role of restorers. The work is under the strict supervision of the city's chief architect, who sees to it that the imagination of a man who is clever with his hands doesn't run away with him and interfere with the unity of a street.

The large number of young people on the street is not surprising since there are two institutes (polytechnic and pedagogical) in the city besides scores of schools and workers dormitories. Another thing that strikes a newcomer is the elegant look of the young Leninakaners. Patched-up jeans and faded T-shirts are not popular here.

The young people are a vivacious lot just as they are everywhere else in Armenia, but they are interested in a lot of things besides just having fun. That is evident in the bookstores, which are always crammed with customers. Bookstores are one place where there are always lines.

The fact that the town has 10 art galleries is another indicator of its rich intellectual life.

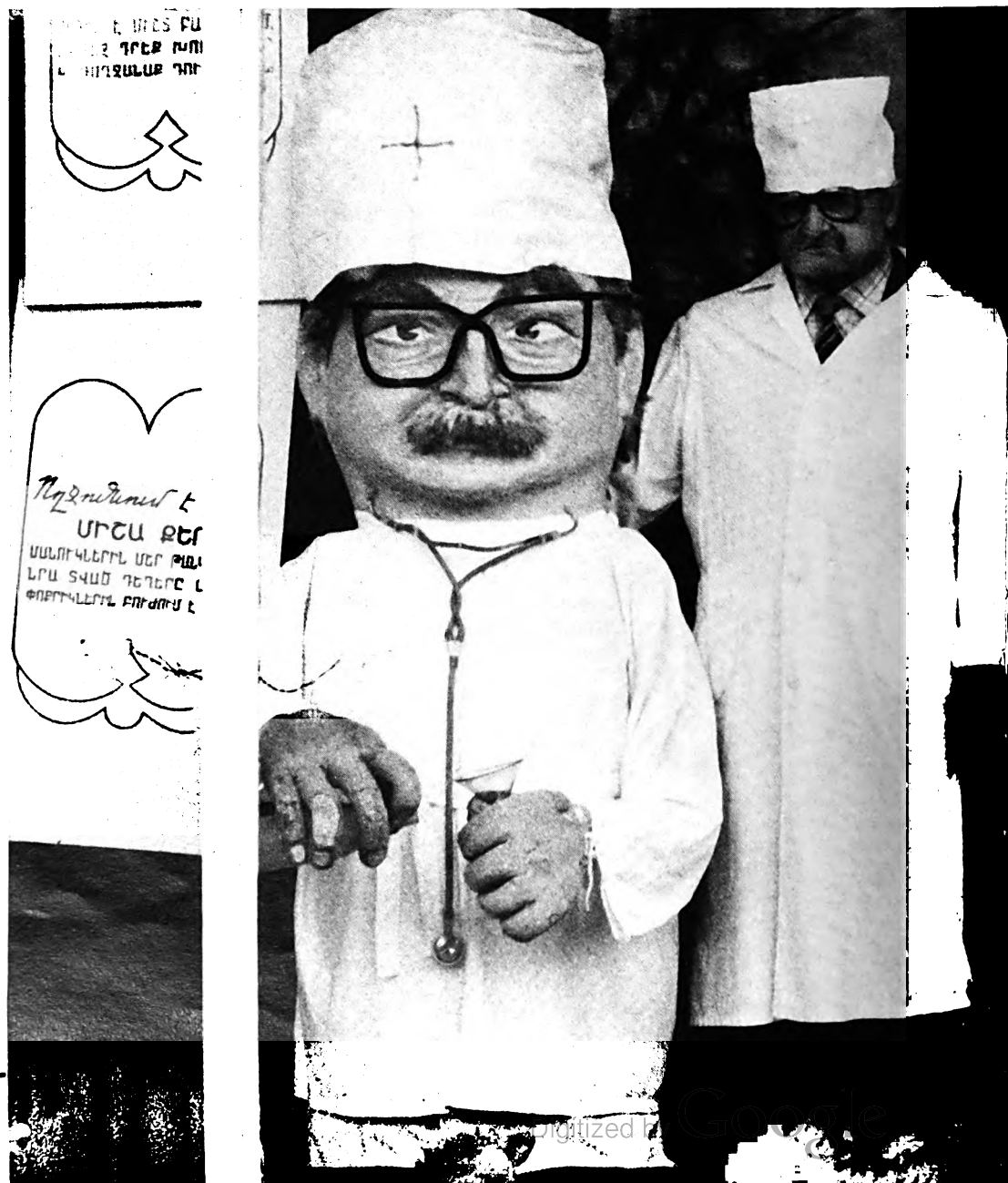
Children are the main topic of conversation here. When people meet, they always start the conversation with the question: "Are the children well?" However, love of children is common to all Armenians, not only those living in Leninakan. That may also explain the comparatively low divorce rate in Armenia.

The air is especially pure because there is an abundance of greenery along the avenues, in the parks and squares; what's more, it is far cooler than in Yerevan. It is true, though, that in wintertime the temperature sometimes drops to 40 degrees below zero centigrade. It probably happened only once, but the people of Leninakan never miss an opportunity to tell strangers, with some pride, that they live in "Armenian Siberia."

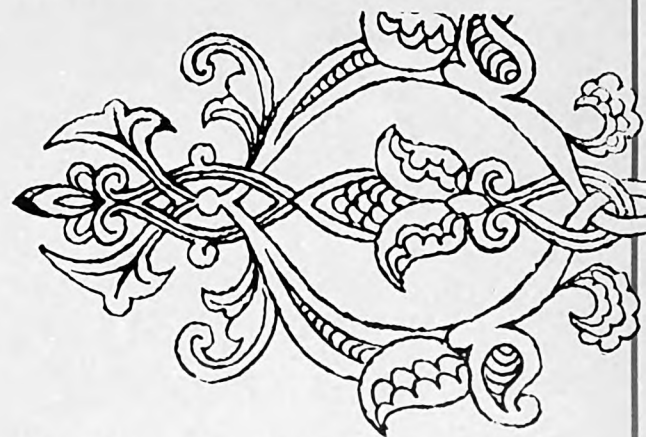
Yurik Vardanyan, the super weightlifter who has been the Olympic and world champion many times, is the most vivid celebrity in Leninakan. Naturally, there are others, like 90-year-old Grigori Muradyan, the last cabby in Leninakan. The children's drugstore is named after Mikhail Akopyan, another popular personage. He is the manager of the drugstore whose window displays a full-length portrait of him. The inscription, in large lettering, says: "Youngsters, listen to my advice and you will never become ill."

It is amazing that everybody knows everybody else in this large city, and people always say something nice about their neighbors to a stranger. The main feature of everyone in this city is their good will. There's no formality in getting acquainted right on the street. It's enough to exchange three or four remarks to be considered a fine fellow and to be invited home or to a café to continue a conversation.

The people who live in Yerevan call Leninakan "a warm city."



Left: An old way of life is disappearing: "Uncle Grisha" (90-year-old Grigori Muradyan), the last cabby in Leninakan, is a relic of the past. Below: "Uncle Misha" (Mikhail Akopyan), children's pharmacist, always stands in the window of his pharmacy. Right: Artworks by students of the school for applied art and decorators have won prizes.



(Our tour of woodland Armenia continues on page 44.)



Family portrait and the staircase Oganēs Mnōyan built. The blacksmith himself is at the very top.

A SINGING FAMILY



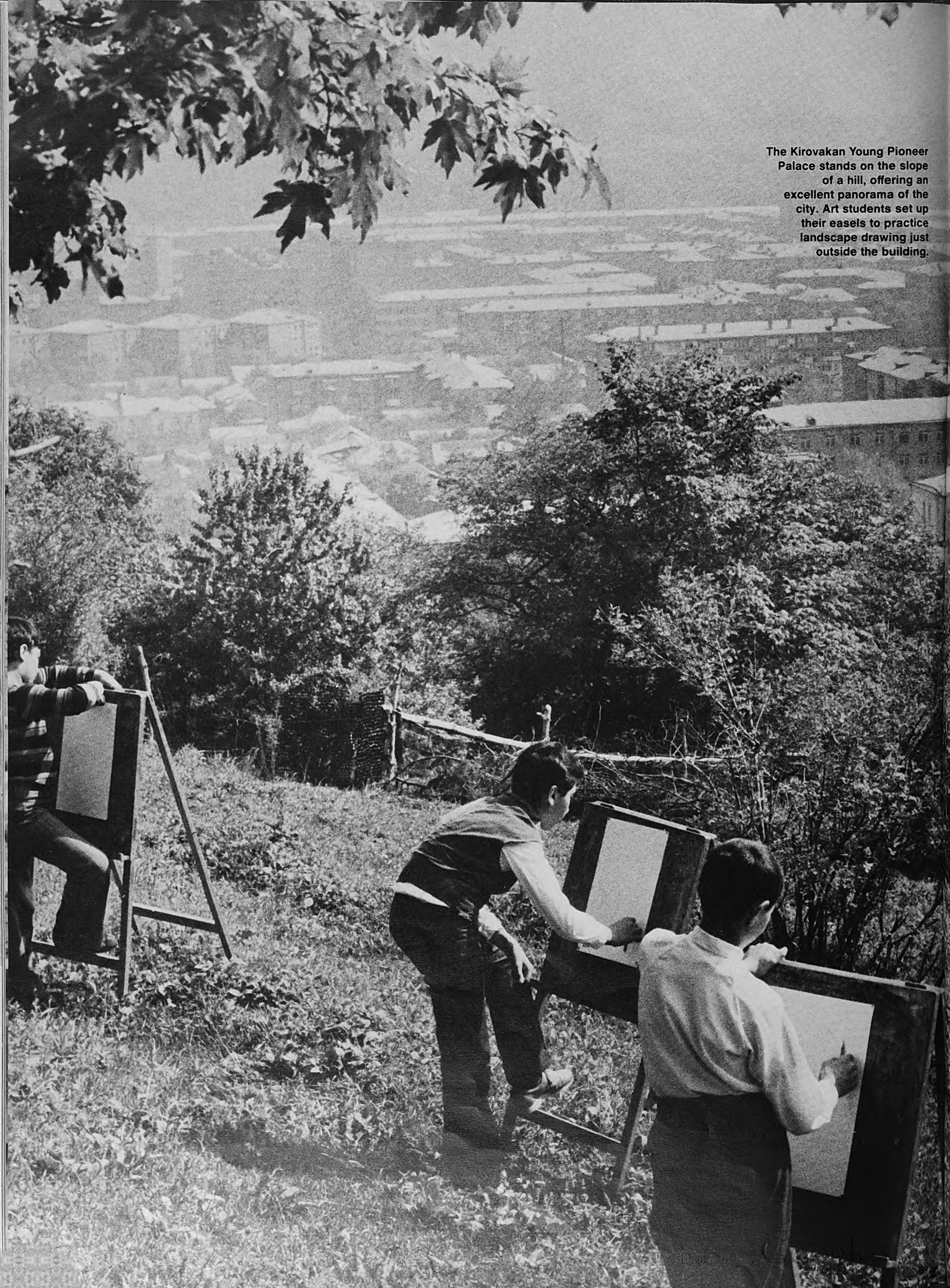
A

"singing family" doesn't surprise anyone in Armenia—there are so many of them. Yet when the Mshetsyan family choral group appears on the stage of the Leninakan Philharmonic Society, it's a sight to behold—18 singers, from 88-year-old Yervand to four-year-old Anna, his great granddaughter. Their repertoire includes 200 songs that are mainly old Armenian melodies and another 50 of their own with lyrics written by Yervand to various folk tunes. Most of them are improvised, says the patriarch. Apparently the improvisations are very good because they always draw a storm of applause.

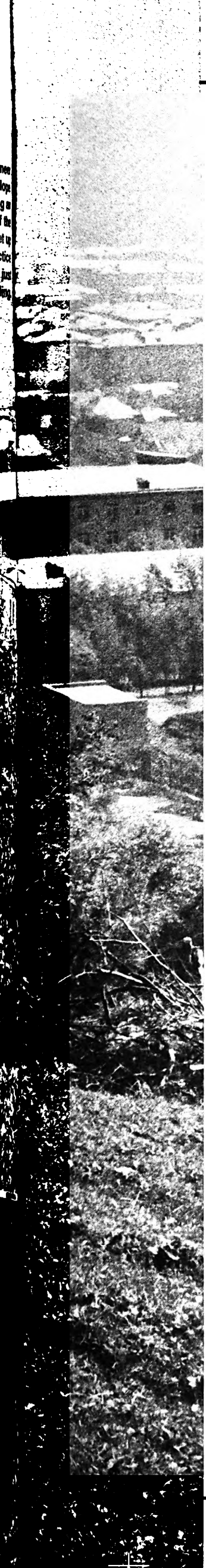
The Mshetsyans of Leninakan are a family of 80. They all live on the same street on the outskirts of town. They occupy nine houses standing in a row, separated only by well-kept gardens. At the group's family concerts, which occur once a week, the number of musicians triples. Some family members play the accordion, others the flute, the clarinet, the zurna, the mandolin and percussion instruments. ■

A concert of songs improvised by the Mshetsyan family was given in the central square of Yerevan. In the center is Yervand, the eldest member of the clan. He is a recognized song composer and also writes lyrics for many of the folk tunes the Mshetsyan choral group performs.



A black and white photograph capturing three children engaged in landscape drawing. They are positioned on a grassy hillside, each with their own easel. The child on the left is seated, while the other two are standing. They are all focused on their work, with the child in the foreground on the right holding a pencil to their canvas. The background reveals a panoramic view of a city with numerous buildings and a river, framed by the silhouettes of trees in the foreground. The scene is bathed in natural light, creating a serene and educational atmosphere.

The Kirovakan Young Pioneer Palace stands on the slope of a hill, offering an excellent panorama of the city. Art students set up their easels to practice landscape drawing just outside the building.



ACROSS WOODLAND ARMENIA

KIROVAKAN, THE GARDEN CITY, AND DILIZHAN, THE JEWEL OF WOODLAND ARMENIA

It takes no more than an hour to get to Kirovakan from Leninakan by car. And during that whole hour, you are surrounded by beautiful landscapes: a tiny grove, a dense forest, then a sharp turn and a panorama of tree-covered mountains.

It is not an exaggeration to call Kirovakan a garden city. It has five times more greenery per capita than Leninakan however many parks and gardens the latter has. Every house in suburbia is surrounded by an orchard. The tree-lined streets, with their two- and three-story cottages, peter out into forest roads. The gorgeous Vanadzor Canyon nearby is the site of a dozen children's summer camps.

Back in the 1920s, what is now the city was filled with summer houses belonging to residents of Yerevan and Leninakan. A major chemical plant was built there in the thirties, along with the city. The area, with its well-populated villages, was able to supply the work force, and a railway connected the area with Yerevan; Leninakan; Tbilisi, the capital of Georgia; and Central Russia, with its well-developed industry. The latter provided the plant with equipment that could not be obtained in Armenia, which was mostly agricultural at that time.

The plant began work in the mid-thirties. The town around it was built rather chaotically, as was often the case with towns that are born during an industrial boom. At first individual new workshops were opened in the workers' settlements. As they grew, they merged with one another and stretched into a long strip along the Pambak River, which crossed the valley. The town center developed according to a strict plan, however, to include every feature now typical of the whole city: spacious squares, wide thoroughfares, lovely pink tufa houses five and six stories high, and lots of trees. Some streets are planted with maples, others with ashes, oaks or Crimean pines. There is a profusion of boulevards and parks.

Kirovakan, with its population of 170,000, is Armenia's third largest city. The chemical plant remains its production core, but it now has well-developed machine-building, electrotechnical and garment industries.

Leninakan and Kirovakan developed along similar lines. As industrial production increased, the population of the two cities kept pace, and science and education flourished in both of them. That explains their similar economic and social problems. But they also differ in many respects. In spite of its rich greenery, the pollution is worse in Kirovakan, what with its thriving chemical industry. The major factories and plants are now being reequipped to eliminate their noxious smokestacks. The project will be finished in several years, and the city will have pure air and water.

The layout of the city is being improved to make Kirovakan more compact, to give some homogeneity to its architectural styles and to facilitate communication between districts.

Young Pioneer Center

Our visit to Kirovakan coincided with the annual Young Pioneer festival. It was obvious how much the townspeople loved it from the crowds of visitors in the large town square, who were just as excited as the participants.

The festival spread into the Central Park, with its open-air stages. That's where the grand and chamber choirs, brass

band, rock group, dance company, elocutionists and conjurers of the Kirovakan Young Pioneer Palace performed.

We were invited to the palace the next day. What we saw there was no revelation to us. After all, it is just one of the Soviet Union's 4,500 Young Pioneer Palaces, and only a medium-sized one at that. For example, each week over 15,000 children between 5 and 16 years of age participate in some activity at the Moscow City Young Pioneer Palace (and there are district Young Pioneer Palaces everywhere in Moscow), while no more than 2,000 a week visit its Kirovakan counterpart.

Here are some statistics cited by Mikhail Akhinyan, the assistant director of the palace. The Kirovakan Young Pioneer Palace is a three-story building built in 1981. It has six concert and rehearsal halls, and 90 rooms for its 46 clubs, which are coached by 70 teachers at morning and afternoon sessions twice a week. In that respect the Kirovakan palace is like any of the others. But there is one thing about it that other Young Pioneer Palaces can only envy: This one is situated in a glade on a gently sloping hill.

In the next five years a sports center will adjoin the palace. It will have a soccer field, outdoor game facilities and a 50-square-meter pool. But the best is yet to come—the Esthetic Education Center modeled after the one in Yerevan. All Armenia is now following suit. Heinrich Igityan, the director of the Yerevan center, coined the movement's motto: "Children are all gifted—merely because they are children."

Dilizhan, a Town They Leave to Return To

Dilizhan, the jewel of the "woodland Armenia" tourist itinerary, is kept until the very end to crown it all when you are sure you have seen everything worth seeing.

Imagine a long journey to the heart of the mountains, where a sunbathed valley with a fairy-tale old town in the middle of it suddenly comes into view.

A health resort with 22 vacation hotels and 3 sanitariums, Dilizhan is considered the best place in the whole country to breathe pure mountain air and to get away from everyday chores.

"Everybody who has ever been here comes back," one of the waiters at the hotel told us. He was the proverbial rolling stone when he made up his mind to settle down at age 30 and went back to Dilizhan.

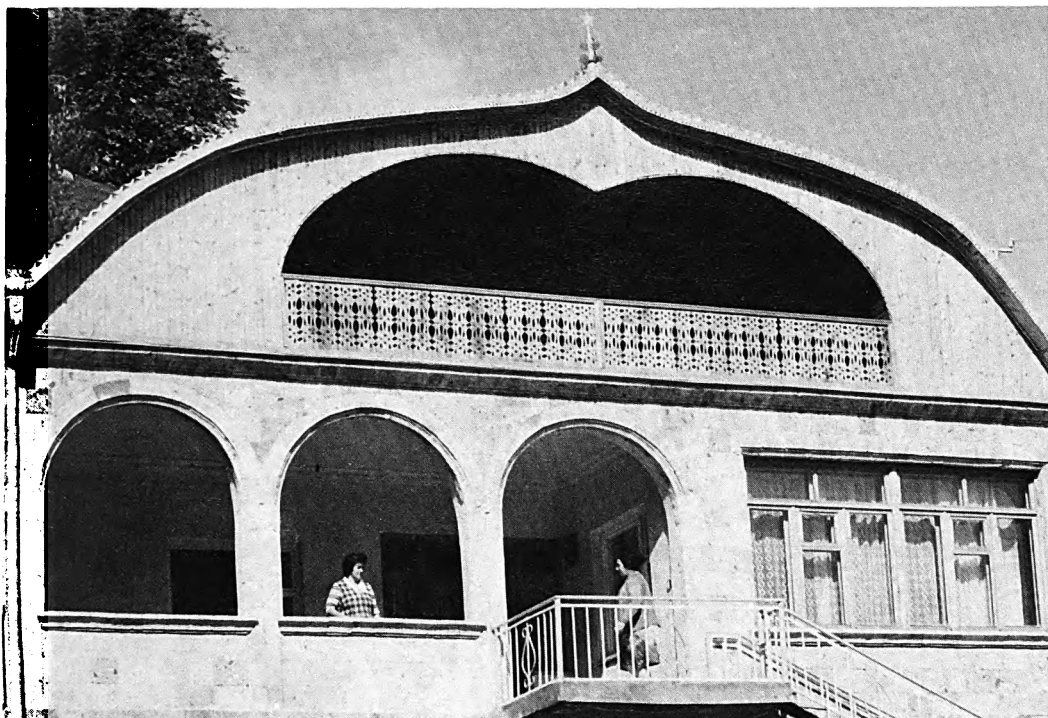
He had lived in Moscow and Yerevan, and we wondered if he was bored in this little provincial place. "Not in the least," the waiter replied. He liked his job and mingling with people. What else could he ask for?

His wife is a nurse, and they have three children. They had recently built themselves a little house on a new street. His neighbors, like the waiter, went back to Dilizhan to settle down when their wanderlust was satisfied.

We asked Mels Engibaryan, the deputy mayor, if the situation was typical. "I wonder if we can call it that now," he said reflectively, "but it's likely to become the general pattern very soon."

Engibaryan told us about the new general plan for the town's social and economic development for the period up to 2000, envisaging the accelerated construction of hotels and sanitariums and improved services. That implies new jobs galore, with cadre training concentrated in the town. A vocational school ▶

This traditional Armenian home was built by a local tinsmith, Vagh Abkaryan, for himself and his family.



"Tall apartment houses do not suit the architecture of Dilizhan," agree the city's chief architect, Seiran Avetisyan (left), and deputy mayor Mels Engibaryan. New and old have been kept apart to preserve the city's architectural integrity.

and add the most conspicuous outbuildings and lean-tos—sometimes to the detriment of the general appearance. So, with the assistance of his Yerevan colleagues, Avetisyan has worked out several kinds of two-storied cottages especially suitable for Dilizhan and in keeping with its landscape and architectural traditions. Calculations have shown that such cottages are cheaper and better to live in than the fruits of the unbridled fantasy of the amateur builders.

Avetisyan is enemy No. 1 of high-rises, and he has convinced the majority of the Town Council members that they would stick out like sore thumbs in his little town—however handy they might be for solving the housing problem, now that the number of local families is mushrooming.

To sum it up, Dilizhan is not one of those lovely places famous for its past. However small, it has fine prospects and eagerly looks to its future.

LAVASH

By Armen Khanbabayan

W

e do not know the name of the man who first invented *lavash*. I mean invented, for that wonderful bread became quite important in the history of Armenia.

Lavash is only one-tenth of an inch thick, and it is baked in special ovens, *tonirs*. Hot coals are laid out on the bottom of a deep narrow pit to heat the walls of the pit red hot. Bending low

over the pit, the baker presses the thin layers of dough to its walls as hard as he can. Some time later, the baked *lavash* sheets are removed from the *tonir* and served hot.

What is especially good about *lavash* is that even a month-old *lavash* becomes as soft and fragrant as a fresh one as soon as it is sprinkled with water. That was probably why *lavash* always accompanied the roaming Armenians in their travels. Indeed, one can eat *lavash* with cheese, butter and spices wrapped up in it as if it were a sheet of paper. One can also spread *lavash* on a piece of rock and use it as a plate. *Lavash* can replace a fork or spoon as well; one can even use it to take food from the table. After the meal *lavash* can be used as a napkin. That's not all! Armenian history tells of people writing on *lavash* when they had no paper close at hand. Those "notes" written long ago have survived to our times. So the irreplaceable *lavash* accompanied every Armenian throughout his or her life, both at home and abroad.

Today the Armenian people, who have gained their liberty and land after many centuries of wanderings, do not have to look for happiness far from home any more. *Lavash*, too, has ceased to travel all over the world in a *hurjin* (pack) on an outcast's back, though it has not "retreated," giving way to other breads and buns. I'd say that the traditional bread still occupies a place of honor on any Armenian table. Every country house has *tonirs* for baking *lavash*. In the towns big *lavash* bakeries have shops attached to them, and they never lack for customers. City markets, too, have rows of counters specially for venders of homemade *lavash*.

Lavash is famed far beyond Armenia's borders. Not long ago Armenian experts set up its production in Moscow, and the demand for it is always greater than the supply. Muscovites quickly learned to appreciate the advantages of this tasty and long-keeping bread.

Lavash, the miracle whose origin is lost in the distant past, is not going to give up its position and become a legend, an ethnographic curio. Everybody enjoys it now. ■



SECRETS OF LONG LIFE IN ARMENIA

By Yuri Dadivanyan
Chief Geriatrician of the Ministry of
Health of the Armenian SSR

Today there are 6,500 long-lived people in Armenia, which has a population of more than three million. The republic has 850 centenarians and more than 30,000 people over the age of 80, the official threshold of a long life. One in 500 residents of the republic is over 90.

Armenia is considered one of the main centers of longevity, not only by journalists, who like sensational headlines, but also by prominent scientists. Gerontologists have studied Armenian centenarians and their way of life for a long time.

The key question we try to answer is simple: What increases the life span of human beings? Until recently most scientists explained the longevity of Armenians by the natural conditions of the upland, including its fresh air, its spring water and its slightly but not excessively heightened solar radiation—in other words, conditions characteristic of country life. This theory was popular until Armenia was urbanized. Today two-thirds of Armenia's people live in the cities and do not have close contact with nature. Nevertheless, recent research shows that the number of people over age 80 is approximately the same in cities and in the countryside. Quite a few centenarians have lived in cities all their lives.

Statistics are stubborn. In this case they show that the environment plays a certain role, but not the main role, in increasing the life span as was believed earlier. Obviously the reasons for longevity should be sought elsewhere.

Today science cannot give an exhaustive answer to this question. Many recognized authorities in the field of gerontology even have different definitions of longevity. Some researchers believe that the present average life expectancy in industrialized countries, 70 to 75 years, is low from the biological point of view. They assert that a human body can function twice as long. The advocates of that theory, however, admit that today centenarians are an exception.

The research carried out in Armenia allows a preliminary conclusion to be drawn: Several factors contribute to long life. The main one is the genetic code inherited from ancestors. Regular physical work is also very important. Most long-lived people

continue to work as hard as they can after reaching the age of retirement even though they are not short of money. Their dynamic and psychological life profile remains unchanged for years.

Much depends on nutrition. The diet of long-lived people is balanced and rich in natural vitamins. They eat a lot of fruit, especially apricots and grapes, vegetables, nuts and honey. It is important not to eat too much. Selif Karapetyan, 105, says that all her life she tried to eat just enough dinner to satisfy her hunger. Almost all long-lived people avoid fats, prefer oil to butter and usually have the local variety of yogurt for supper. Most of them do not smoke. The smokers prefer homemade tobacco and a pipe and are skeptical about cigarettes. They sleep nine to ten hours a day and have a good night's rest. As a rule they have a hobby. Many of them like to play with their grandchildren and great-grandchildren best of all, and specialists think that this play helps aged people avoid stress.

Our doctors are working hard to decipher the "code of longevity." All long-lived people are put under the observation of local doctors. The number of well-equipped geriatric medical facilities keeps growing. Specialized courses train geriatricians and encourage research devoted to the peculiarities of treatment and to the prevention of diseases in old age.

Doctors are not the only ones to display such interest in long-lived people. In Armenia old people enjoy everybody's respect. They have a decisive voice in the settlement of arguments and indisputable authority in family life and in the upbringing of children. Their life experience is very much appreciated, to say nothing of their memories of events of long, long ago.

One more interesting fact. Most old people in Armenia are lucky to avoid such typical concomitants of old age as selfishness, stinginess and grumbling. Maybe the respect for gray hair and old age that is encouraged in everyone from childhood makes the old people retain their sense of dignity and their youthful spirit. Character is largely determined by other people's attitude toward a person. When one sees 95-year-old Armenak Virabyan unhurriedly reminiscing to a group of teenagers, one realizes that, despite his age, he is young at heart. The young people's interest in him and in his amazing life stimulates his inner life and proves to him that society needs him.

Old people are loved in Armenia, and everything is done to make their lives long, interesting and happy.

ARMENIA WHAT IS IT LIKE?

Population Growth Rates

In 1920 Armenia's population was 720,000. By 1985 it had increased to 3,342,500. The population growth rate is rather high, exceeding that of the Russian Federation, the Baltic republics and neighboring Georgia.

The national composition of the republic is predominantly Armenian—89.7 per cent according to the 1979 census. Azerbaijanians are second with 5.3 per cent, Russians third with 2.3 per cent, and Kurds fourth with 1.7.

Languages

Armenian is the most widely used language. It was considered the mother tongue by 99.4 per cent of the residents of Armenian nationality during the 1979 census. The mounting bilingual trend, pronounced in other union republics, obtains here, too. In 1979, 34.8 per cent of the Armenian residents had an excellent command of Russian.

Family

Armenia ranks lowest in the Soviet Union in the number of divorces per thousand of the population.

Armenia has 948 men per thousand women—a pattern more favorable for marriage and the family than the national average.

Urban and Rural Settlements

In the past several decades Armenia has become one of the most highly urbanized constituent republics.

In 1939, 29 per cent of the population were urbanites; between 1950 and 1959, 50 per cent; in 1970, 59.5 per cent; and in 1983, 67 per cent. Yerevan, Leninakan and Kirovakan account for 46 per cent of the population.

Education

Armenia has 13 institutions of higher learning, including Yerevan University. Almost 400,000 specialists graduated between 1960 and 1980, 170,000 of that number with college and university degrees.

Theaters and Cultural Centers

The following figures characterize Armenia's cultural development: 15 theaters, about 900 movie houses, 1,200 cultural centers, about 1,500 public libraries and 47 museums.

Every year the republic publishes about 1,000 new books and brochures in a total printing exceeding 10 million copies. Seven hundred titles of that number are published in Armenian. Of the 91 magazines and 87 newspapers published in the republic, 77 are in Armenian.

Radio and television broadcasts are in Armenian, Russian, Azerbaijani and Kurdish.

Health and Recreation

Armenia has about 170 hospitals and 12,000 doctors (one doctor for 278 persons). Armenia has far outstripped such developed countries as France and the Federal Republic of Germany in the number of doctors per 10,000 of the population.

Like everywhere in the Soviet Union, Armenian health care focuses on disease prevention. The republic's sanitariums and vacation resorts accommodate about 150,000 people every year. ■

SOVIET JAZZ SINGER

TATENIK OGANESYAN



By Levon Dayan
Photograph by Armen Ter-Mesropyan

F

or the fifth time in the past 10 years 30-year-old Tatevik Oganessian of Yerevan has been named the best Soviet jazz singer in a poll organized by the popular Soviet Leningrad Jazz Club.

All Soviet musical periodicals unanimously praise Oganessian's singing. Indeed, she has devoted half of her life to jazz—the art born in

another part of the globe, New Orleans. And here is what she says about how it all began.

"I was born into a family of professional musicians, and my life has been filled since childhood with folk melodies sung by my father and mother. My elder brother was a student of classical music, and jazz was his hobby. He used to listen to records of the best classical jazz musicians, and sometimes he tried to play his favorite jazz tunes on the violin. Eventually his hobby became mine, too, and that was how I became a professional jazz singer."

At age 13 Oganessian made her radio debut singing the song "Paper Moon" from Ella Fitzgerald's repertoire. Two years later, following her parents' advice, she enrolled at a music school in the department of choral singing and conducting. Concurrently Oganessian studied classical jazz on her own and perfected her English. A person who takes everything she does seriously, she sings classical jazz songs in English.

Ella Fitzgerald is her favorite singer to this day, and she prefers her style of singing. When Oganessian was invited to join the Armenian variety orchestra directed by Konstantin Orbelyan, her repertoire very much resembled that of the incomparable Ella.

The Armenian orchestra is known for its original jazz arrangements. Oganessian has toured with the orchestra in the USSR, Western Europe and America, where she was warmly received by the audiences. During their guest tour of the United States in 1975, American music critic John Wassermann described the orchestra's repertoire as jazz with an Oriental flavor. Twenty-year-old Oganessian provided the vocal focus of the program. In Wassermann's opinion, her fiery and swinging voice won her tremendous success.

In 1978 prominent Soviet jazz composer and arranger and virtuoso pianist Igor Bril invited Oganessian to join his jazz group. There her talent revealed itself in all its splendor. This purely jazz band does new interpretations and improvisations of the world's classical jazz themes. Oganessian gives special preference to the themes of Duke Ellington, George Gershwin and Juan Tizol. As the most recognized jazz singer, she is asked to sing with various professional jazz groups from Moscow, Leningrad and other Soviet cities. Oganessian participates in jazz festivals in this country and abroad, where she is always praised by music critics.

Normally unhurried and thoughtful, she changes entirely on the stage, following the soft and lyrical blues and spirituals with fiery vocal arrangements. What does she think is the most essential element in a jazz singer's life?

"Even the most scrupulous and interesting work on radio and TV can't compare with the pleasure of singing to an audience. Of course it takes great physical and emotional effort. But whatever program we are working on—classical jazz pieces or arrangements of Armenian folk tunes that give me new themes for jazz interpretations—the joy of singing entirely overwhelms me."



Katya Lycheva and Star Rowe bring a message of peace to the United Nations.

YOUNG SOVIET PEACEMAKER TOURS THE UNITED STATES

By Igor Ignatyev
TASS Correspondent

Soviet schoolgirl Katya Lycheva spent less than two weeks in the United States last March. The stay was brief, but it was enough time for the 11-year-old to make many good friends. Katya came to the United States on a special mission at the invitation of the San Francisco-based Children as the Peacemakers Foundation.

By sponsoring the trip in memory of Samantha Smith, the peacemaker who visited the Soviet Union in 1983 and who tragically died in an airplane crash in Maine last year, said Patricia Montandon, founder and executive director of the foundation, we hoped that more and more children would join the peace movement. "Children have that purity, honesty and integrity. They are coming from innocence, and they are very worried about their future. They are afraid of not growing up because of a nuclear war. By working for peace, the children can eliminate that fear."

Said Katya: "I never met Samantha Smith, but I saw and heard her on television. Samantha's visit to the Soviet Union inspired me with the hope that children can make a big contribution to the cause of peace, to the maintenance of peace on Earth."

When the Children as the Peacemakers Foundation extended its invitation, it set two conditions: First, the Soviet girl who would be selected for the peace tour had to be active in the peace movement, and second, she was to be no older than Samantha was. At a press conference in Washington, D.C., Katya stressed that many Soviet girls could successfully fulfill the mission of a visiting peacemaker. And that is true. Still, it was Katya who was eventually selected. She takes part in antiwar productions and recitals at her school theater. She is also an active member of the International Friendship Club at Moscow's Palace of Young Pioneers. At her school she organized a Samantha Smith exhibit. Katya hopes that the exhibit will be transformed into a museum one day in memory of that wonderful girl from the State of Maine who captured the hearts of millions of people.

In the United States Katya was accompanied by Star Rowe, a 10-year-old girl from San Francisco. Katya visited New York City, Washington, D.C., Houston, Chicago and Los Angeles. Americans, both children and adults, enthusiastically welcomed the young peace ambassador. The mayors of Chicago and Washington called the time she spent in their cities Days of Children as the Peacemakers. Katya's stay in New York City and Los Angeles was proclaimed Days of Katya Lycheva.

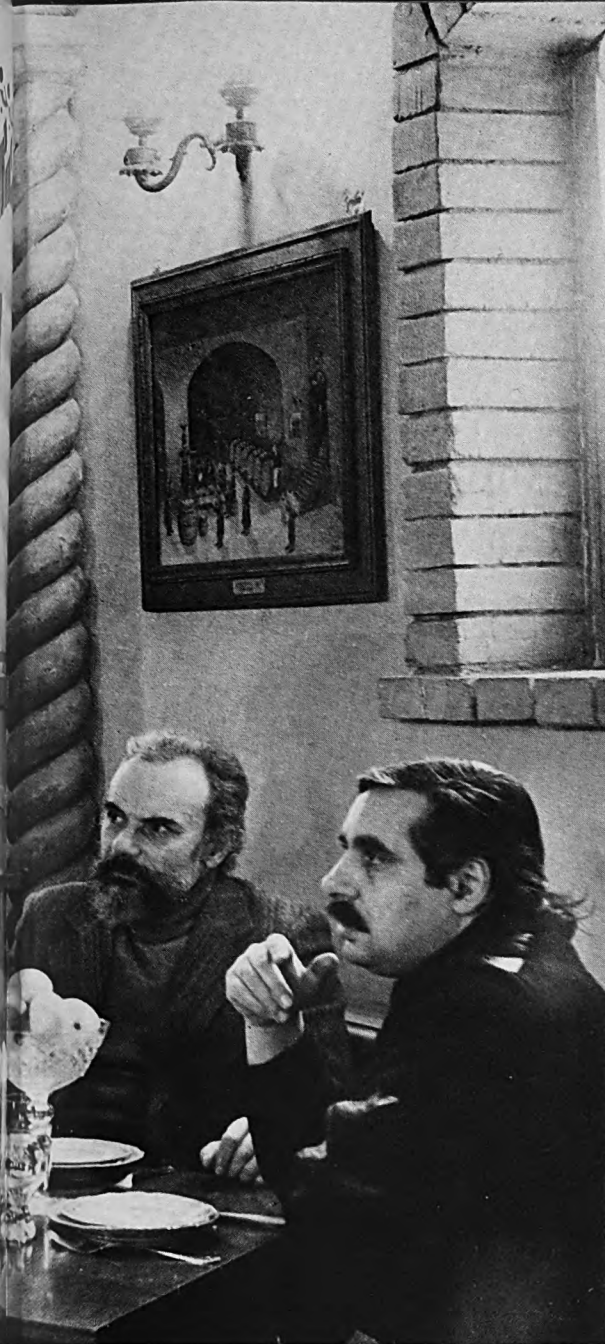
In New York Katya and Star visited the UN. "If I had an opportunity to address the United Nations," said Katya, "I would certainly express the ardent desire of all Soviet children for peace. I want the International Year of Peace, proclaimed by the UN in 1986, to continue forever. I want the senseless arms race to be stopped and toys to be manufactured instead of guns. Then there would be enough toys for all the children in the whole world."

I saw how warmly Katya was met at Washington's Samuel E. Wheatley Elementary School. Fourth, fifth and sixth graders filled the hall, which was decorated with colorful balloons. There was a huge sign in Russian over the entrance reading: "Welcome, Katya!" When Katya entered the hall to the sound of the song "Let There Be Peace on Earth," the young audience burst into a storm of applause.

"I think it's a happy event that a little Soviet girl came to our school," said Toni Edwards, a fifth grader. "I think it's exciting because we can learn from her about her country, and we can tell her about our country."

At Wheatley Elementary and at the other schools Katya visited, she gave her hosts paper doves that had been made by Soviet schoolchildren especially for her visit. On one side of each dove Soviet children wrote their addresses. Katya asked American youngsters to write theirs on the other side.

Katya had numerous meetings, talks and discussions in the United States, and all of them boiled down to one word—peace. Katya Lycheva, her new friend Star Rowe and millions of other children throughout the world believe that they can make a difference; they can persuade adults to think again about the dangerous consequences of the nuclear arms race. Children trust adults, and adults must live up to that trust.



THOUSANDS of Americans recently visited the exhibition of Eduard Kazaryan's microminiatures, which the *Los Angeles Times* called "the eighth wonder of the world." People stood spellbound at his earlier exhibitions in Japan, France, Australia and Canada. Kazaryan thinks a steel statuette of Charlie Chaplin displayed in a needle's eye is his best work. Another breathtaking wonder is a fiddle weighing 0.003 of a gram, whose 56 wooden parts are covered with gold leaf and whose four strings, which are visible only through a microscope, produce audible sounds.

"The words micron and even millimeter sound very abstract to most people. So, to bring my works closer to our usual standards, I place them on human hairs, on corn and rice grains, on fig seeds cut in two, and the like," said Kazaryan.

Kazaryan needs from 18 months to four years to make a single miniature because he can work with his chisel only between heartbeats, otherwise his hand shakes as he makes his well-trained, minute movements under a powerful microscope. Beautiful art objects are not all he produces. His instruments and gadgets are widely used in eye surgery and in neurosurgery.

The first exhibition of Kazaryan's work took place in 1947. He has made more than 350 exquisite miniatures since then, 200 of which are on display in museums in the Soviet Union and abroad.

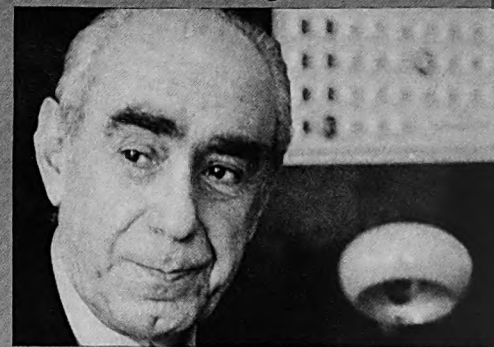
Microminiatures are Kazaryan's hobby. A violinist and violin maker by profession, he ranked among topnotch violin makers even at age 20. Many performing musicians in Armenia play his instruments.

Now 65, Kazaryan leads the Pomposa Ensemble, and he has himself made all the instruments the ensemble uses. He has also invented many musical instruments, including the stringed organ shown on the left, one of his latest endeavors.

CARPETS, MACHINE TOOLS, COMPUTERS

By Tsolak Badalyan
President of the Armenian Chamber of Commerce and Industry

Armenia's products are increasingly competitive in international trade, and the republic has developed trade contacts with more than 70 countries worldwide.



THERE was a time when brandy, wines and carpets were the lifeblood of Armenia's economy and its staple exports. Today they have sunk to the bottom of the list of export items. Through the national foreign trade organizations we have permanent contacts with chambers of commerce and with foreign trade organizations in countries of the Council for Mutual Economic Assistance, an intergovernmental organization of socialist countries founded in January 1949 to assist in mutual economic development. We maintain mutually beneficial business contacts with France, Italy, the United States, Finland and some other countries of the West. Developing nations, too, receive Armenian exports. Armenia engages in brisk trade with more than 70 countries, which is evidence of the increased competitiveness of Armenian products. Annually, we export 180 items produced by more than 80 Armenian factories and organizations; 50 per cent of them are machines, equipment and sophisticated hardware, including computers.

International exhibitions and fairs boost trade, economic contacts and cooperation between states. At them, we give foreign business people an idea of Armenia's export potential and industrial output. During the last five years, more than 11 million people have seen our products on exhibit in Montreal, Canada; New Delhi, India; Plovdiv, Bulgaria; Baghdad, Iraq; Barcelona, Spain; and Tsukuba, Japan.

Today our foreign partners are most willing to buy Armenian machine tools and engineering products—power transformers, diesel engines and mobile power plants. More than 10 countries buy our electric motors for use in machine-tool manufacture, instrument making, shipbuilding and computers.

France has in recent years been importing sodium acetate, diamond tools and grinding powder from Armenia. Armenian electric measuring instru-

ments are in great demand in the Federal Republic of Germany.

The United States and the Netherlands buy large amounts of copper sulfate, brandy and books. At the 1984 Barcelona Fair we sold asynchronous motors and handwoven carpets to Spanish firms. Armenian artifacts, jewelry and fashion footwear do not lie collecting dust on the shelves of Western shops.

Besides taking part in exhibitions abroad, our Chamber of Commerce sponsors foreign specialized exhibitions in Armenia. Alfa-Laval, Sweden; Nisso Boeki, Ltd., Japan; Nina Ricci, France; and Pfaff, West Germany have displayed their products in Yerevan in recent years. Their representatives studied our export capabilities, and then we signed export contracts.

Our Chamber of Commerce and Industry is praised outside the Soviet Union as well as within the country. In 1980 the International Organization for Commerce awarded it the Gold Mercury prize for the promotion of trade.

The commercial and economic contacts of the Soviet Union, and of Armenia too, are spreading wide, and this condition benefits the international climate.



Armenia's Chamber of Commerce and Industry has received many awards at international exhibitions and fairs, including the Gold Mercury Award, for the promotion of trade, shown at upper right.

Mesrob Mashtots, shown in a portrait by Stepan Nersesyan, created the Armenian alphabet at the end of the fourth century A.D. Well suited to the language, Mesrob's alphabet is still used by Armenians throughout the world.



THE ALPHABET THAT IS ANCIENT AND MODERN

By Marina Khachaturova

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Armenia will this year celebrate the 1,625th anniversary of the birth of Mesrob Mashtots (361-440), the creator of the Armenian alphabet, which is used in both old and modern Armenian.

A monument to Mesrob stands at the entrance to the Matenadaran, the Institute of Ancient Manuscripts, in Yerevan. With his right hand Mesrob points to an inscription from The Proverbs (1:2), "To know wisdom and instruction; to perceive the words of understanding." These were the first words written with the letters of the Armenian alphabet. With his left hand Mesrob points to an eagle with a sword, the symbol of freedom and statehood of ancient Armenia. At his feet is his loyal disciple Koriun, the author of

The Life of Mashtots, which is kept in the Matenadaran along with other priceless manuscripts.

Like all Armenians, Mesrob lived in hard times. The second half of the fourth century was a time of long wars between Armenia and Persia. In 387 Armenia was divided into two unequal parts—West Armenia, ruled by the Roman Empire, and East Armenia, which became Persia's vassal. The loss of independence signaled the loss of national culture, religion, language and traditions. Armenia, which once was a great country, faced the real danger of losing its national identity. Educated people, including Mesrob, were well aware of that.

In A.D. 301 Armenia made Christianity its official religion, but the absence of an alphabet hampered proselytization. Divine service was conducted in Syrian in East Armenia and in Greek in West Armenia. People who did not know these languages could not be influenced by the Christian church. The Syrian and the Greek clergy encroached on the national rights of the Armenian Church, seeking top positions in it to deprive the church of its independence. In East Armenia the Persians were trying to eliminate Christianity altogether. At that time Christianity was the only force that could unite the Armenians.

Wonderful Alphabet

At the end of the fourth century Mesrob, who was depressed by the hardships that had befallen his long-suffering country and realized the importance of Christianity, took monastic vows and went with his disciples to preach Christianity in the remote regions of Armenia. He felt an urgent need for an alphabet. For once the interests of the czarist government (which still held power in spite of the country's dependent position), the church, the feudal lords and the people coincided. The creation of an alphabet and the dissemination of Christianity through sermons in the native language were indispensable for unification and national self-preservation.

Mesrob worked very hard for the next few years. He traveled, studying local dialects and comparing their common features. He visited many cities in Asia Minor, consulted experts in Armenia and abroad and studied the alphabets of different nations. In 393 he finally created the long-awaited alphabet.

The 38 letters offered by Mesrob convey with amazing accuracy the phonetic richness of the Armenian language. His contribution has stood the test of time; the alphabet has never been changed.

In his book *The Life of Mashtots*, Koriun, his favorite disciple and biographer, wrote: "He fathered a new wonder—the Armenian alphabet." *The Life of Mashtots* contains valuable historic material on the Armenia of the late fourth century and the first half of the fifth century and is the best source of information about the creation of the Armenian alphabet. Thanks to Koriun, who wrote the biography soon after Mesrob's death, we have firsthand information about the work of the talented thinker, educator and humanitarian. The Matenadaran, named after Mesrob Mashtots, has many manuscripts of Koriun's book. It has been translated into foreign languages.

According to Koriun, Mesrob Mashtots was "the son of a highborn man named Vardan" from the village of Hatsekats in West Armenia. He went to a Greek school and later served as a member of the czar's council. "He was well versed in secular laws, and his subordinates loved him for his knowledge of military science," Koriun wrote. Soon Mesrob abandoned secular life, became a recluse and started teaching. "He endured different hardships, giving himself up to spiritual exercises. He tested his strength by solitude, hunger and thirst; he lived in dark caves in the mountains, ate only grass, wore a hair shirt and slept on the bare ground."

Renaissance

Mesrob wrote down the letters, named them and assigned them an alphabetical order. Then they were calligraphed by the Greek master Ropanos, who wrote the first words in the letters of the new alphabet, "To know wisdom and instruction; to perceive the words of understanding." The choice of that phrase was symbolic—Mesrob cited it to show the Armenian people the way. He was a statesman aware of the importance of an alphabet for the education and unification of a nation.

Koriun described Mesrob's triumphant return to his homeland after the years of roaming and working on the alphabet. The whole country was jubilant. When Mesrob and his disciples approached Vagarshapat, which was the capital of Armenia at the time (it is now the city of Echmiadzin, the center of the Armenian Church, 20 kilometers from Yerevan), they were heartily welcomed by the Czar of Great Armenia Vramshapuh, the Catholicos and princes, "and then returned to the city with cries of joy, religious hymns and loud praises. They spent several days celebrating."

The country entered a renaissance. Mesrob was very successful as an educator. Schools teaching the new alphabet were opened throughout the country, and books were translated into Armenian. The first one was the Bible. Original works were written in Armenian. The creation of the alphabet united Armenians into a nation and gave them moral support in the struggle against invaders.

Mesrob's achievement had a great historic significance for the Armenian people and for the development of its indigenous culture. When long-suffering Armenia lost its independence in cruel and bloody battles with its formidable enemies, its alphabet and language were a powerful weapon of defense and self-preservation against moral enslavement and assimilation.

Koriun shows that Mesrob performed his feat with the help of his associates and disciples. His was a truly national cause.

The Chapel of St. Translator

Koriun wrote that Mesrob Mashtots spent 45 years in monastic exile. He described the last minutes of his life, giving the exact date of his death—Saturday, February 17, 440. He also described his funeral. Mesrob was buried in the village of Oshakan, on the side of Mount Aragats, 30 kilometers from Yerevan. Some time later "a beautiful temple made of carved stone was built there."

Today people come to the chapel to pay tribute to Mesrob. They call it the Chapel of St. Translator because Mesrob and Catholicos Saak Partev, his associate, translated into Armenian the books of the prophets, the epistles of the apostles, the gospels, Genesis, the Revelation of St. John the Divine and other parts of the Holy Bible. Koriun says that besides translations from the Holy Bible Mesrob wrote his own books.

Time has no power over Mesrob Mashtots. Armenians pronounce his name with reverence and will cherish his memory as long as the nation exists. The Armenian culture was preserved and developed thanks to Mesrob. Now Armenians can be proud of a rich literature in their native language, which is 16 centuries old.

THE GREEN VALLEY

TO MY READERS

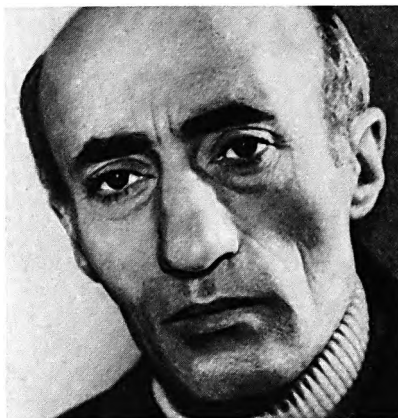
I was born in the countryside in 1935. My way of life for the next 15, 20 and even 30 years was much closer in time to that of Ovanes Tumanyan, Leo Tolstoy or even Homer than to our modern times. I plowed the land, mowed the grass, helped deliver calves, grafted trees. To avoid a long enumeration, I will simply say that should the legendary Flood happen again, I, like Noah, could revive a great farming and animal-breeding culture on Earth. I am grateful for all that to the 15 years I spent in the village. If anything were to happen to humankind's memory, I could write anew the code of human morals in the image and likeness of the life of my fellow villagers of those times. Incidentally, something very much like that did happen to my people. The land where I was born, the little village of Akhnidzor with its 60- or 70-odd farmhouses was swept off the face of the Earth in 1798 when the Persian Shah Agha Mohammed overran the region, or perhaps in 1606 during the raid of Shah Abbas I, or perhaps even earlier by the Turks and Arabs. In any case, the last time it was destroyed was in 1798.

In this beautiful mountain region, sacked and pillaged a thousand times, there lived a young lad called Ovanes some 150 years ago. Ovanes Matevosyan was the son of Tovmas. He didn't have a penny to his name; he had brought nothing with him from the remote village of Akhpat but his wife—we'll call her Yeva—a pair of capable hands and Armenian, his mother tongue. Our village, as I remember it, was inhabited by their descendants. It was a world in itself, with its fields, threshing floors, meadows, springs, a merry school with 200 students, and its memories.

The village founded by Ovanes, this Ark that he fitted out, kept afloat for 150 years, and after that the whole world entered a new phase of life before our very eyes, and before our very eyes in the past 10 or 20 years that village, that Ark, that age-old human habitat, began to disintegrate, flounder or, perhaps, readjust itself. I would like to repeat Ovanes' experience in literature. I would like to cut a clearing in the forest and populate it with people and animals. I draw much on my memory of the village of my youth and create a lot anew. It is very much like a migration to a new village whose name, Tsmakut, I have invented. I'd like to create a lot of good people so that there would be no room left for the bad; I would also like the action of my stories to take place in an imaginary period in which there would be no room for war; but I have no choice, and whether I like it or not, I have to be a chronicler of our times.

Why do I write? Is it because Ovanes Tumanyan and Leo Tolstoy wrote? I think so, to some extent. But even to a greater extent because of the works they did not write or that they wrote and that did not turn out the way they wanted them to. However, if any one of God's creations can say why it is a flower, a wolf, a horse, a man or a picture, then a writer, too, can say why he is a writer. As for myself, I only know that I am an Armenian, that I am 51 years old and that I write. I wish to be the chronicler of the fates of those who are individuals but who are termed "capita" in statistics, the "background" in the dramas of great tragedians and the "crowd" in the works of poor writers.

Our poet, Amo Saghiyan, once said: The foreign invaders decided to liquidate the country's rulers and leave it without leadership; they called the princes and their sons to gather in the Nakhichevan monasteries allegedly for a council, and then they locked them in and set the buildings on fire—the royal dynasty of Armenia had been done away with before that—and suddenly the ordinary Armenian peasant realized that the country was left without rulers, that his home had turned into a state and that he was at once the ruler and the serf, the prince and the worker, and the master. The first part of what I have said is confirmed by old Armenian chronicles, while I will try to record the second part, the part which shows the great achievements of my people, the achievements of resurgent Soviet Armenia.



Grant Matevosyan

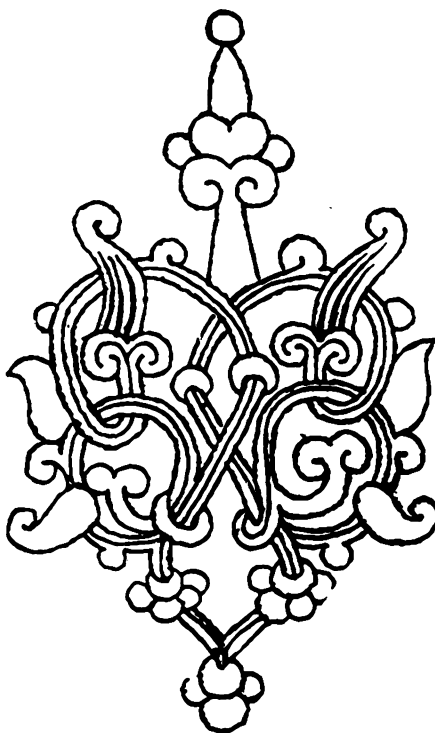
The lightning struck the cliff with a dry crackle, ricocheted and dived into the green earth. The green cliff was strong; the lightning was hardly able to chip off two or three splinters. The ground beneath the cliff was the grave of all spears of lightning attacking that valley throughout the spring and summer; they stayed forever buried under the cliff, and at every crash of thunder the big spreading oak would thank the cliff in its oaken language for drawing down upon itself for countless ages all the lightning flashes and hurling them into the valley, saving the oak from imminent destruction.

When the lightning was still lancing through the clouds, considering whether it should strike now or later, the foal's mother with a gentle whinny called him to her; she knew that at any moment the sky might split with a roar that would frighten her foal; he, however, thought that his mother was calling him to nurse; he considered a moment—was he hungry or not?—and decided that he wasn't, not yet; what he wanted was to smell the grass and flowers, to get to know them—and then the lightning struck, followed by the roar of thunder. The foal jumped and wanted to run to his mother, but he was too frightened to see where she was and ran in the opposite direction. The mare would have gone to him, but she was tethered: She could only call him with her gentle whinny.

The foal was barely a month old, and this was his first thunderstorm. He cowered under his mother's belly and from there listened a while to the rain drumming on the leaves of the oak. Then he peered out, saw the cliff, the wild rosebush, the oak; he blinked and quite forgot he had been frightened by the lightning and thunder; he thought he must have come to his mother because he wanted milk, and, wagging his brief black-tipped tail, he turned in again under her belly, and the old mare straddled her legs and slackened her body to let the milk flow more freely.

The foal was wonderfully pretty, with tiny white stars all over him that looked like a cloak of hoarfrost. His legs were long and slender with a white stocking on the right hind leg—as though, while he himself had been covered with hoarfrost, his leg had been dipped in snow. His neck was long and slender and his head small, with a white star on the forehead. This valley was a drinking place for deer and their fawns, sheep and lambs—and for this mare, who had had many foals in her life but never yet one so handsome. He was the handsomest creature in the green valley. His mane and tail were black. We did not know what his eyes were like because he would not let us come close enough to see, but shied away. We knew they must be beautiful because all horses have beautiful eyes, and as a rule, they reflect everything around them. The eyes of that foal would reflect the oak, the flowers, the wild rosebush, his bay mother and the green valley.

He was rather foolish, but that was because he was still very young. A raindrop rolled down his leg and he shied, kicked and ran away from his mother. She did not call him back; the rain had stopped, the lightning had ended and the Sun was shining. ▶



The green valley sparkled in the sunshine. The rain-washed leaves shone on the oak. The wild rosebush shone, too. So did the wet back of the horse. And the back of the foal. And the brook which started from the gray cliff and passed along the whole green valley. But the brook smelled of lightning, and the foal backed away from it. The wild rosebush smelled of lightning, too—the foal ran off a little way, stopped, examined it from a distance, and then step by step drew near again to test that smell.

The old mare knew all the scents of the valley. She knew all the scents of the hills and valleys round about, but she knew this particular valley best because she was often tied up there. The smell of lightning would soon go away, as soon as the Sun dried it together with the drops of rain. The scent of thyme did not belong to the valley; it was carried by the wind from the hills together with the smell of wet sheep's wool. The mare grazed and thought that there must be sheep on the far side of the hill since the wind brought this smell of wet wool, so there would be dogs there, and a shepherd.

On the far side of the hill sheep are grazing, thought the old mare; the damp grass tastes good, the water in the brook is sweet, the Sun is warm and my foal, startled now and then, grows in the warm, kindly peace of his good valley.

Then the mare raised her head. The oak stood quietly, languid in the heat, the gray cliff dozed, the foal was sniffing at the wild rosebush. The Sun was warm, the grass tasted good after the rain, it was time to graze. The mare dropped her head and tore off two or three tufts of grass, but something was worrying her, and she raised her head again.

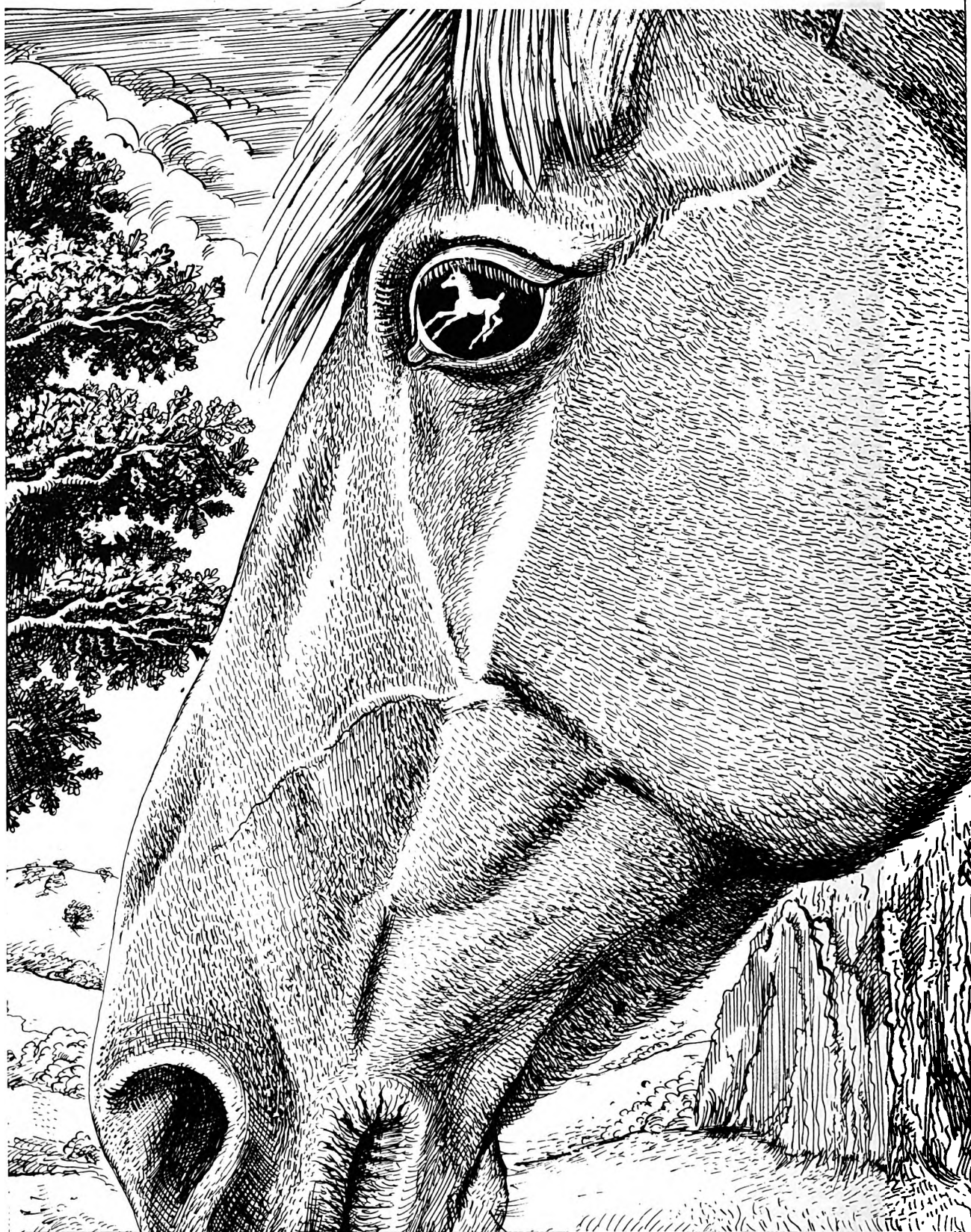
Standing motionless in the green valley, her head thrown back, the old mare stood listening to the silence. Everything was as it had been a moment before: The oak stood quietly, the cliff dozed and the foal ran and jumped beside the wild rosebush. Why not just graze? But the bay mare didn't even dip her head to the ground; she lifted it and stood, listening to the secret voices of the valley. She blew out her nostrils and listened again to catch any sound that did not belong there. A butterfly passed silently, bees hummed, the brook babbled and the foal stretched out his neck and ran around the bush after the butterfly. But those were not the sounds the old mare was listening to or the sights she was trying to see. Danger lay hidden in the valley. The air carried no sound of it. It could not be seen, the wind did not bear its scent, but the old mare could no longer graze peacefully.

The old bay mare began to be angry. She was angry because the valley contained an enemy, but that enemy could be neither seen nor heard, and it was impossible to know exactly where he was.

The gray cliff, the mighty spreading oak, the mare and the wild rosebush all stood in the green valley, looked and listened in the quietness. For the cliff the green valley held no danger because the lightning had already passed for that day. Everything was fine for the oak, too, because the cliff had once more protected it from lightning and the Sun was warm and caressing. And for the wild rosebush, all was well because the foal could not reach its gleaming white flowers. But the old bay mare was wet with the tension of expectation.

The valley played traitor to the mare; it did indeed conceal an enemy, but it did not betray him—neither his voice nor his scent. The old bay mare dared not approach her foal lest the sound of her footsteps drown the stealthy approach of the enemy. The bay mare hardly breathed lest she might fail to catch the enemy's light breath. The old bay mare did not blink lest in that moment the enemy might leap from place to place, unseen.

There they all stood in the valley—the cliff, the oak, the wild rosebush and the mare. The cliff dozed. Acorns protected by their armor filled with juice, and the oak was glad because everything was good. The wild rosebush held up flower cups to the Sun and basked in its warmth, but the old bay mare trembled with outrage. Never before, not once, had the valley failed her like this. It may be that the smell



Drawing by Roman Starik

of the lightning prevented her from getting that other scent, the scent of the enemy who was close, very close—the mare sniffed but the scent of the enemy was drowned by the smell of ozone left by the lightning.

The foal looked attentively at something and then at his mother. Again he looked and again glanced back. But his mother could not see what her foal was looking at. It could not be seen from where she stood. The foal stared, then turned his head to his mother—she stood motionless, her neck outstretched and her eyes blazing.

The foal looked at his mother again and began walking toward that which had so aroused his curiosity. And in the same moment she smelled the unbearable, hated smell of wolf. She neighed loudly and flung herself at the foal, and saw a she-wolf take off and leap smoothly at her child.

On the other side of the hills the wolfhounds guarding the sheep heard the short angry neigh of the mare. They would have taken alarm, but soon everything was quiet and they settled down again.

The bay mare rushed to the foal, she rushed at top speed and fell. She was an old horse and she had fallen more than once in the course of her long life, but this time it was very unexpected. She fell and at once got up. And she fell because she was on a rope and she had rushed to the foal at full speed. Now the rope was strangling her and would not let her get to her foal.

The foal wanted to go to his mother. He tried to run in big circles to get to her, but every time the wolf cut him off so that he found himself farther and farther away. And the rope was strangling the mare. At last the foal thought what to do. He would jump over the wolf. He jumped, but the wolf caught him by the leg and he fell. The foal screamed in terror.

The scream of the foal was heard on the other side of the hill and the wolfhounds pricked their ears.

The foal screamed and jumped up, and his mother sat back on her hind legs with all her weight, strained with all her strength toward her foal and the wolf, and the rope snapped, slapping her side. Freed, she rushed forward with all her power, all

her fury and all her love. She was a swift mare but never had she run so swiftly.

On the far side of the hill the thudding of her hoofs could be heard, but then the valley's voices took over again and the shepherd boy and the dogs settled down.

The wolf left the foal and slipped out from under the hoofs of the old mare. She stepped forward and the wolf backed.

The mare advanced and again the wolf moved a little back. Her muzzle almost touching the ground, the mare advanced slowly, and the wolf flattened, preparing to seize her nostrils. Then the mare turned, presenting her hind quarters.

The mare turned her hind quarters to the wolf, but the wolf did not spring; it circled to get in front of the mare's muzzle again. The mare, sheltering the foal beneath her belly, again turned her hind quarters to the wolf, and the wolf again ran around her and stopped in front of her muzzle. But the mare turned swiftly and managed a kick. A long spring brought the wolf in front of her muzzle again, and this time she was not quick enough; the wolf got her by the nostrils, but she managed to free herself with slashing forelegs. The wolf did not make off; it sat down and watched the mare. And the mare watched the wolf. The wolf knew that the mare would defend her foal to the last, and the mare knew it wouldn't be easy to drive off the wolf. The mare was dripping foam, but the wolf, too, was very tired. The wolf leaped suddenly and kept on leaping, aiming at the mare's nostrils, and the mare kept on turning, and keeping her foal beneath her belly. Darkness was falling and their movements became slower, the wolf crept almost on its belly around the mare, and she, too, turned slowly and heavily, sometimes stumbling, keeping her feet with difficulty. They could hardly see one another for weariness, they were nearly deaf with it.

The shepherd boy climbed to the top of the hill to watch the sunset. It glowed red, and its light tinted the only oak tree in the valley. But what he saw there was so appalling that he almost choked with rage—because down there in the valley a wolf had fastened on to the muzzle of their old bay mare, and she could not trample the wolf and at any moment she could fall.

"Hi! Anybody who's there, hi!" the voice rang from the hill that cradled the valley on the other side. "Hi, a wolf's choking a horse, choking her now! Hi, loose the dogs, set the dogs on them! Hi—"

The shepherd boy opened his mouth to shout but no sound came; he could only brandish his arms but couldn't say a word. The dogs alerted, looked down into the valley. The dogs saw, and took off—Topush, Bob, Sevo, Bogar, Chalak, Chambar. Black-faced Topush was the most experienced; he would silently attack a wolf and silently throttle it. Now, too, he ran in silence, outstripping the others. But Bogar was the youngest in the pack: He was a bit afraid of wolves so he always began barking while still some distance off so that the wolf would run away and there wouldn't be a fight. Now, too, he ran and barked. Sometimes he overtook Topush but did not venture to break away from the others and run ahead. He slowed and waited for Topush, ran beside him for some time, again drew ahead and again waited.

When the horse was about to fall, the wolf heard, as though in a dream, the barking of dogs. The wolf did not want to believe they were barking at her—fate could not be so cruel as to let a whole day's hard work be in vain. Would she have to return to her hungry cubs without meat?

When the mare was almost drained of strength, her numbed nostrils hardly feeling any pain, and everything was dark before her eyes, she heard the barking of dogs; she was sure they were barking because of her foal—fate could not be so cruel as to let her foal die. The old mare knew that the barking sounded far off because she was tired and heard badly. She knew she needed to hold out just a little longer, just until the dogs could get to her. But it was so hard to breathe, and life had become such a heavy burden.

The barking broke off at the wolf's very ears and still the wolf could not believe that success won with such difficulty could turn into failure. In the den her cubs were hungry, but what could the wolf do? Something pierced her neck painfully, her ear hurt—and the wolf let go of the mare. The wolf's paw was jammed hard against the ground; to release it required strength, but where could she find it? She wanted to sleep, sleep. She wanted to die, to rest from it all at last. She pressed herself to the ground—the important thing was to protect her throat, not to let the dogs take her by the throat. They bit her back, got her by the neck, the ears, but the wolf still protected her throat, rested and gathered strength beneath a pile of dogs.

She bit a paw, and a dog flinched away with a howl. She got to her feet, and the dogs surrounded her, waiting to see what she would do. The wolf looked around her. There were many dogs. It would be difficult, impossible to break free and get back to her den. And the dogs looked at the wolf. For a moment they stood looking at each other; the wolf did not know yet what she should do, and the dogs did not know what they should do either. Then one of the dogs sprang at the wolf with a snarl. The wolf remained on her feet, and she knew this was the most dangerous dog, the black-faced one.

"Hi, lad, hi—whoever's there, run and help the dogs, run, help them kill the wolf," voices called from the opposite hilltop.

The mare could hardly remain standing. Her head was heavy and sank. She felt that the foal was sucking but could not even be glad. Her head sank, her forelegs buckled and still the foal sucked. The mare collapsed on the ground. The foal stood alongside waiting for his mother to get up, but she lay motionless. The foal pushed his nose into her belly but she didn't rise, she didn't even move. Then the foal got down on the ground beside his mother—his hind legs were painfully cramped—and began to suck. His mother could still give him milk; for the last time she gave her milk to her already orphaned foal, the handsomest of all the foals, the little foal who was covered with bright stars, whose mane and tail were black and wavy, who had one white foot and a star on his forehead and who was a bit silly, but that was because he was so young.

But the wolf? The wolf managed to get away. If she hadn't, the cubs would have been orphaned, quite helpless, and would certainly have perished. But the wolf managed to get away. It was not a headlong flight. It was a long, crafty retreat, step by step, leap by leap. When the dogs prepared to attack and tear her to pieces she turned, baring her fangs, the hair erect along her back; the dogs hesitated, and the wolf managed another two or three leaps.

The black-faced dog wasn't able to take the wolf by the throat, and the wolf wasn't able to bite him and frighten him. The black-faced dog was no longer chasing the wolf because he had swallowed a tuft of the wolf's fur and been left behind, coughing, choking and clearing his throat with disgust. So the black-faced wolfhound didn't follow the wolf, and the rest of the pack were not particularly dangerous because there was none who could equal the black-faced wolfhound.

The dogs let the wolf escape and then lost her trail, but for a long time they raced here and there in the green valley where the cliff was now quite black, where the oak stood quietly, where the wild rosebush offered up its two cups of flowers for the dew and where the body of the old bay mare lay on the ground.

The foal stood beside his mother, uneasy, as though he understood what had happened.

The setting Sun for the last time lighted up the green valley, and there was a black, very black circle of earth under the body of the old bay mare. It was the place of the duel between mare and wolf, a black circle trampled by the mare's hoofs. When you looked at that black trampled circle, it was easy to understand for how long the old mare had been turning and forcing the wolf to circle around her.

For a whole three years that black circle re-

mained. For three years nothing grew there, and the white skeleton of our old mare lay lonely on that circle. But then the green conquered. First a few blades of grass pecked their way through the ribs and some flowers appeared, then the lush grass came and spread, and the green valley became wholly green again.

When you look down from the hilltops, the entire valley is green; the oak stands majestically by the cliff, and the cliff, dozing, listens to the pacing of the clouds; the wild rose basks a little farther off, holding up its white cups to the Sun, and a horse grazes in the green valley, a horse that seems to have stars on his hide and a white stocking on his right hind leg, with a long neck, long legs, dark tail and mane and a white star on his forehead. When he takes a step, he favors his right hind leg somewhat; it bears an old scar.

The horse raises his handsome head with the star, and his eyes reflect the cliff, the oak, the flowering wild rosebush, the green valley and the white clouds sailing across the blue sky.

"Is that all?"

"Yes, that's all."

"No."

"Why 'no'?"

"Don't let the mare die."

"How can I tell you the mother didn't die? She was dead, and the foal was standing despondently beside her. When the shepherd who had called out from the opposite hilltop got down, the mare was already cold, and the old shepherd and the shepherd boy sat for some time beside the body of the bay mare wondering how they were going to rear the motherless foal."

"But they did rear it, didn't they?"

"Yes, with milk from another mare."

"No, the mother mustn't die."

"How can I tell you she didn't die when the whole summer I fed the orphaned foal with milk from another mare?"

"Shall I tell you what happened?"

"Tell me."

"The shepherd boy climbed the hill sooner and saw the wolf in time."

"The shepherd boy climbed the hill too late, when he couldn't help."

"But why did she die—the mare?"

"When the old shepherd and the shepherd boy were sitting beside the body of the bay mare, the old shepherd told the boy that her heart had burst with fear for her foal, and with fury and hatred."

"Hatred for the wolf?"

"Yes, the wolf."

"I want the dogs to kill the wolf."

"No, I can't tell you the dogs killed the wolf, because our black-faced wolfhound Topush had swallowed wolf's fur and very nearly choked to death himself."

"Were you the shepherd boy?"

"Yes, and the mare was ours, and the foal was born of our mare."

"And now the foal's grown up and is tied in the green valley?"

"Yes, he's grown up, and that's where he grazes."

"Does he remember his mother?"

"Perhaps he does, because horses do remember."

"Then tell me it all again from the beginning."

"The lightning struck the cliff with a dry crackle, ricocheted and dived into the green earth. The green cliff was strong; the lightning was hardly able to chip off two or three splinters. It's true, the nearby oak tree was rather frightened, because lightning often strikes oak trees and burns them. So the oak was a little frightened. And the long-legged little foal, with stars all over him, was very frightened indeed, so frightened that he wanted to run to his mother, but because of this fright he couldn't see clearly and so instead of running to his mother, he started off in the opposite direction, and the old bay mare called him back with a gentle whinny. . . ."

Translated by Eve Manning

THE MIRACLES IN STONE

By Astkhik Bek-Ovsepyan
Photographs by Victor Adiyani

A

Armenian architecture has made a fabulous contribution to international architecture.

For many centuries gifted Armenian architects worked to create a style of their own. Still, their brilliant ideas would have come to nothing without the craftsmen working side by side with them: masons, stonecutters and sculptors, real masters of their trades. Studies of ancient monuments show that stone architecture in Armenia was technically perfect. Moreover, the architects and craftsmen went far beyond their contemporary traditional construction techniques—they were masters of what we call rock architecture, carving buildings in rock.

Gegard, or Airivank (cave monastery), is one of the best specimens of this technique. The monastery, 38 kilometers southeast of Yerevan, is situated in a picturesque canyon, on the slope of a natural amphitheater of steep rocks sharply outlined against the blue sky. The main church, built in 1215, has a spire and a four-columned porch. A later extension built against the rock forms its northern wall. In 1282-1283 the builders penetrated deeper into the rock, cutting several churches and halls inside it. This magnificent sculpture typical of thirteenth century Armenian architecture is still breathtaking.

The exquisite taste of the Armenian architects revealed itself in their choice of sites for monasteries and other buildings. The size and proportions of their buildings were in perfect harmony with the environment, emphasizing the beauty of the surrounding landscape.

The progress made by classical Armenian architecture rooted in the pre-Christian era can be attributed both to the high level of local construction technology and to the fabulous deposits of durable, multicolored building materials, easy to handle and available locally. Armenian architects used the amazing properties of local rock ingeniously to erect walls, arches and vaults.

Christianity became Armenia's state religion in the fourth century A.D., and local architects turned to building churches. The very first Christian temples were prayer houses and basilicas, a new trend in Armenian church architecture. Thus the Odzun Church, built in the sixth and seventh centuries, is a domed basilica. This impressive building is amazing for its perfect planning, exquisite outline and elaborate alternation of interior light and shade. Its northern and southern façades are decorated with galleries ending in a blank wall on the western façade, with an arched doorway in the center.

The domed halls are built along the same lines as domed basilicas. Their composition is breathtaking—spacious and light, which creates an elevated, solemn mood.

The Ptgn Cathedral is the first domed hall known to us. The majestic ruins of this sixth century church (only its northern wall and part of its southern façade have been spared by time) are still a fascinating sight. Some interesting statuary depicting hunting scenes remains visible on the southern wall. The frieze under the cornice of the northern wall is made up of pitchers.

Armenian architects were born masters of church architecture and experts in the construction of castles and fortresses.

One of the most interesting specimens of civil engineering in medieval Armenia was the Amberd Castle situated on the southern slope of Mount Aragats, 10 kilometers from the village of Byurakan. It is remarkable for its exceptionally well-chosen strategic location: It rises on top of a triangular rock surrounded by the deep canyons of two mountain rivers, the Amberd and the Arkashen. Amberd Castle used to be an impregnable fortress built in the best traditions of medieval fortification planning. Some of its buildings were erected as early as the seventh century, but the whole ensemble was completed in the eleventh to the thirteenth centuries.

One of the most magnificent architectural structures, the ensemble of the Sanain Monastery, was built in the tenth to the thirteenth centuries. The exact date of its construction is unknown, but a legend tells us that Gregory the Illuminator (an early Christian missionary in Armenia) erected a cross on the site of the future monastery early in the fourth century. According to the available historical data, its first building, the Church of Astvatsatsin (Our Lady), was built by Armenian monks who came from Greece in the first half of the tenth century. This original architectural ensemble comprises five different churches, a belfry, a library, family burial vaults, and so on.

The Kecharis Monastery is situated on the edge of a wood in the village of Tsakhkadzor (Armenian for "flower canyon"), now a vacation resort 57 kilometers from Yerevan. The monastery was built in the eleventh to the thirteenth centuries. Its most impressive building is Gregory's church, built in 1033 during the rule of Prince Gregory the Magister. It is one of the most majestic looking medieval Armenian churches. The Kecharis Monastery is also famous for its numerous *khachkars*, memorial stones with a sign of the cross and intricate patterns carved on their surfaces.

Another monastery, Nor-Getik (Goshavank), is picturesque indeed. Situated high up in the mountains, on a heavily wooded slope in the very center of the village of Gosh, 23 kilometers from Dilizhan, it comprises several churches and secular buildings erected in the twelfth to thirteenth centuries. Its main temple is the Church of Astvatsatsin, built in 1191 by its abbot, Mkhitir Gosh, one of the most outstanding medieval Armenian philosophers and the author of *The Code*, a book of medieval laws.

The construction of monasteries, which began late in the tenth century, gained momentum in the twelfth and the thirteenth centuries. Various cultural and educational institutions of those times concentrated around the monasteries. The monks ran celebrated schools and universities and miniature painting studios, and they established unique manuscript depositories.

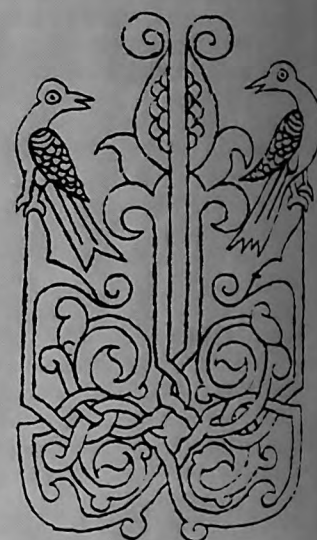
The Sagmosavank Monastery was one of the major cultural centers of medieval Armenia. Apart from its other assets, it had a collection of valuable manuscripts written by its monks. The Sagmosavank Monastery rises on a high rocky bank of the Kasakh River, and its majestic-looking buildings are clearly outlined against the mountains.

The Khor Virap Monastery is also a magnificent sight, located as it is in the Ararat Valley, on the bank of the Aras River. Legend has it that Gregory the Illuminator was cast into a pit on this site. The Church of Astvatsatsin and the Church of Lusavorich (Illuminator) were built in 1661 on the site of the earlier temples.

All the architectural masterpieces of Armenia have one thing in common—magnificent masonry and carved stones of different origin. Bricks and wood were of secondary importance in the Armenian architecture of those days, and their effect on its structures and forms was insignificant. Hewn and polished square frames and slabs were used for the construction of monumental, secular and religious buildings. The most unique feature of Armenian architecture was its intricate stone carving, the main decorative element of all Armenian buildings.

Beginnings of An Indigenous Armenian Architecture

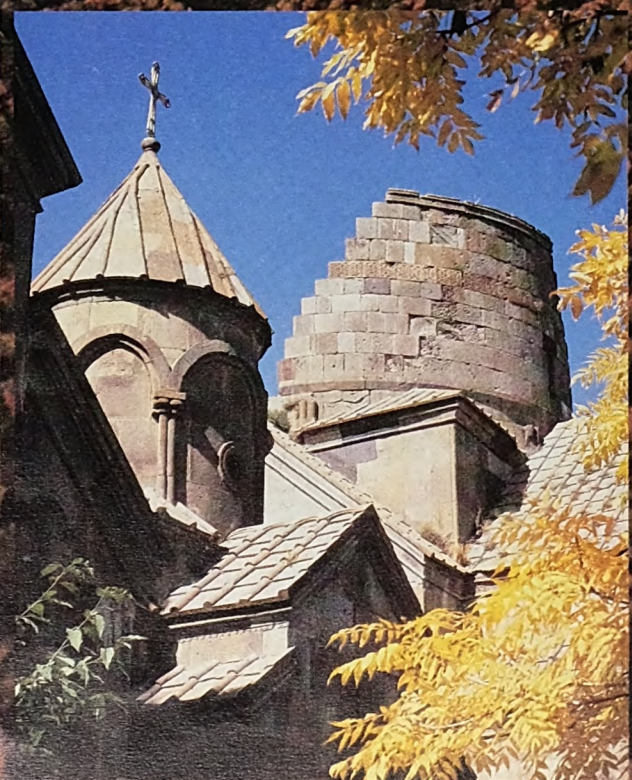
Armenian architects and craftsmen were far ahead of the traditional methods of construction known at their time. Facing page: The cathedral at Ptgn (top) and the monastery at Gegard (Airivank), four miles southeast of Garni in Abovyan District, are fine examples of the way buildings were carved out of the indigenous rock.





Historic Masterpieces of Rock Architecture

Monasteries and Churches

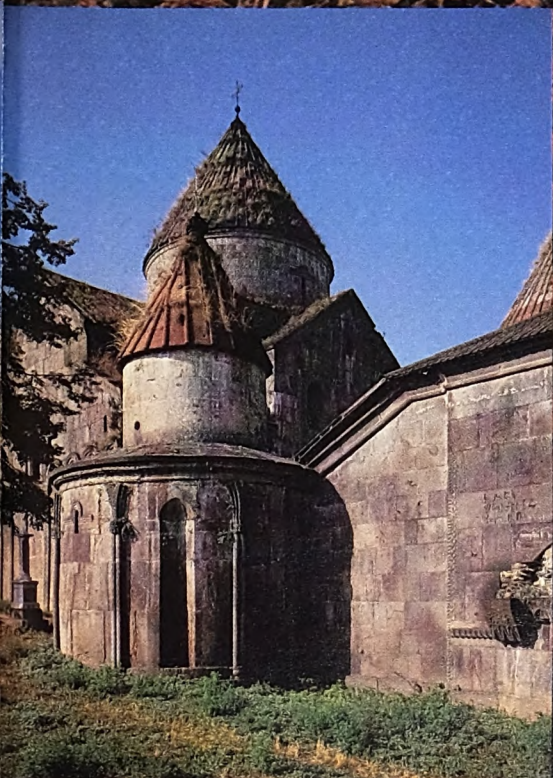




Stone Carving Characterizes Armenian Buildings

Armenia's architectural masterpieces all use magnificent masonry and intricately carved stone. Monasteries and churches in this tradition date from the sixth century.

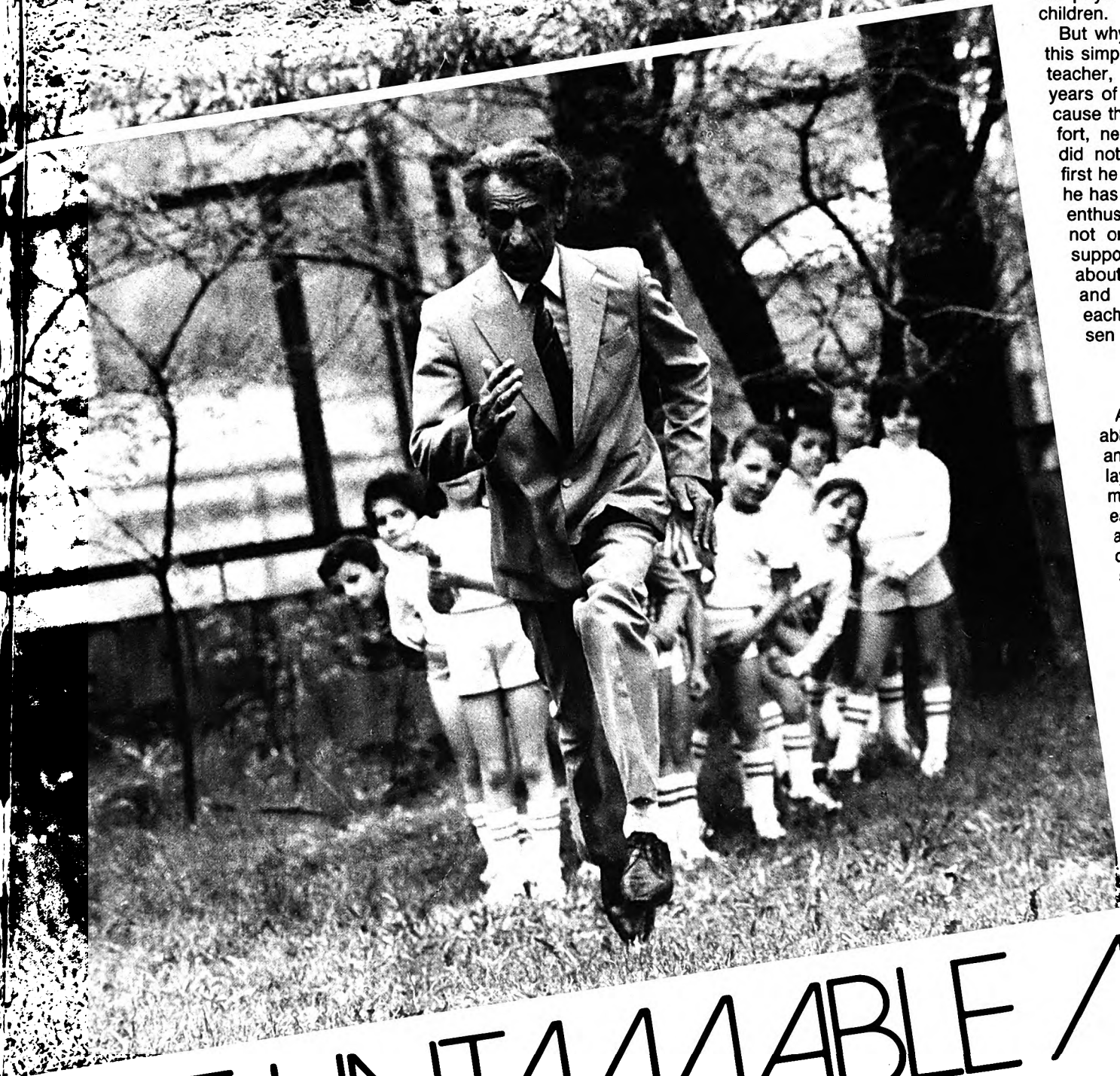
Left: The monastery at Khor Virap (Deep Dungeon) stands in the Ararat Valley, on the bank of the Aras River. Below, left to right: Kecharis, in Tsakhkadzor; another view of the façade of Kecharis; Amberd Church, near Byurakan; Sanain, in Alaverdi; Sagmosavank, on the Kasakh River; and Odzun, in Tumanyan District.



Children at play in the kindergartens of Leninakan do not realize that their daily games and exercises are developing their physical coordination, strength, deftness and confidence while also improving their posture.



The program of physical activity developed by Oganes Arakelyan (facing page) has been adopted by all the preschool centers in Leninakan. A fringe benefit of the program has been a marked decline in illness.



S

ome 20 years ago Ogan Arakelyan, a graduate of the Leninakan Teachers Institute (Soviet Armenia), went to a kindergarten to look for future champions and record holders. At that time it was fashionable to discuss the prospects of sports specialization in childhood. A serious trainer and recruiter, it was said, could spot great athletic talent even in a five-year-old child and

could groom a gymnast who would perform complex exercises impeccably by age 14 or 15.

This prospect did not suit Arakelyan, however. He saw the youngsters' stoop, the inadequate mobility, and the energy that failed to find an outlet. Everyone saw these characteristics but regarded them as inevitable in the physical development of "urbanized" children.

But why should this be inevitable? When this simple question occurred to the young teacher, it marked the beginning of many years of selfless work. It was selfless because the work took so much physical effort, nervous energy and inspiration but did not bring Arakelyan any laurels. At first he was alone in his campaign. Today he has dozens of volunteer assistants as enthusiastic as himself, influential (and not only in Armenia) patrons and the support of the "big press," which writes about "Arakelyan's lessons" willingly and favorably. But at the beginning each step in the direction he had chosen cost him immense effort.

Hurdles Race

All Arakelyan wanted was to enable each child to grow strong, agile and skillful. The aim he set himself lay in finding the optimal ratio of movement and physical strain for each child for a day, for a week, for a month and for a year. He frequently encountered lack of understanding and even active opposition. Even the USSR Academy of Pedagogical Sciences received a letter with a demand to put a stop to Arakelyan's "harmful" activity ("What does he think he's doing with our children?").

Only the irrepressible, passionate Arakelyan could turn the disbelieving and the indifferent into allies. His greatest breakthrough he describes as follows: "I would have achieved nothing if I had not learned to think the way they ►

THE UNTAMABLE MAN

By Fyodor Alexeyev
Photographs by Yuri Somov

do." By "they" he means the children—kind and supportive, but only if they like the lesson and catch on at once to what the teacher means.

And what lessons are conducted by Arakelyan and his assistants (and now also by the teachers in all the preschool centers of Leninakan)? The lesson for the youngest group (children aged three) lasts 50 minutes, for the middle group an hour and 13 minutes, for the senior group an hour and 27 minutes, and for the preparatory group (six-year-olds) an hour and 40 minutes. Children begin with morning exercises, then they do exercises on the balance beam and wall bars, and they practice running, walking, climbing and participating in games—soccer, basketball and volleyball. What else? Table tennis, swimming, cycling and, in winter, skiing. It often snows in the winter in Leninakan.

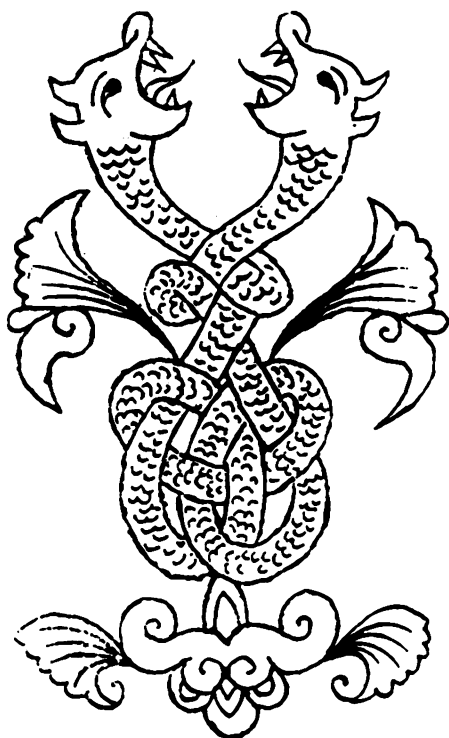
Children Who Never Catch Cold

No one in Leninakan pursues the aim of attaining spectacular results in sports. Results were not the main thing even during the first-ever city games for preschool children, which were a great success. The results incontrovertibly demonstrate a high level of physical fitness. Whereas five or six years ago young sprinters covered 30 meters in 8.5 seconds, now they do it in 6.6 seconds. The length of jumps has increased from 1 meter 21 centimeters to 2 meters 26 centimeters. This is the average length, not a record.

Even people who have long comprehended the miraculous effect of Arakelyan's experiment are struck by the high proportion of the children in the Leninakan preschool centers who do not become ill—82.5 per cent—and by the fact that none fall ill three or four times a year. The proportion of children with obvious deviations from correct posture has plummeted from 37.4 to 9.3 per cent in the past three years. These are striking demonstrations of the effectiveness of Arakelyan's lessons.

One more detail of no small importance. It is well known that flat-footedness is widespread among children in industrialized countries (according to foreign studies, one-third of all children are afflicted with it). Ninety per cent of the children attending the Leninakan kindergartens have healthy arches.

The recognition that Oganeg Arakelyan received and the eminent experts who came to Leninakan to learn from his experience did not turn his head. The more he accomplishes, the more projects he has for the future. On his insistence sports facilities in 15 kindergartens were reequipped. Of course such modernization required vast expenditures. The estimate was adopted by city authorities as a very urgent matter, but there is nothing surprising about that. "Children" is the magic word that opens any door in Armenia.



Even people who understand the effect of Arakelyan's experiment are struck by the high proportion of children who do not become ill—82.5 per cent.

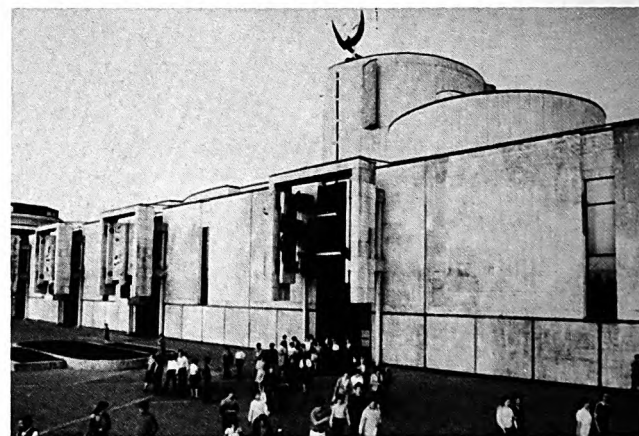
**NEXT
ISSUE**



KARELIA: THE LAND OF 60,000 LAKES

Travels Through the Republic

Read the next issue to learn about the Karelian Autonomous Soviet Socialist Republic, its natural beauty and its unique architecture. You will also meet some local people and read an interview with the Chairman of the Council of Ministers.



THE FIRST AND ONLY ONE IN THE WORLD

Children's Musical Theater

The July issue will introduce readers to the world's only children's musical theater. The home of the theater is crowned with a bluebird, a symbol of happiness and the name of a ballet the group will perform on its tour of America in 1986.

THE HOPE OF THE FUTURE

Young Student Families

Several articles will explore the problems students face as they combine the new responsibilities of raising a family and continuing their studies.

COMING SOON

Halley's Comet: Observation by Two Unmanned Soviet Space Stations, Vega 1 and Vega 2



Echmiadzin Cathedral, fourth century A.D.
Wooden mosaic made by Garnik Alikhanyan,
a 70-year-old joiner from Dilizhan.

Photograph by Yuri Somov